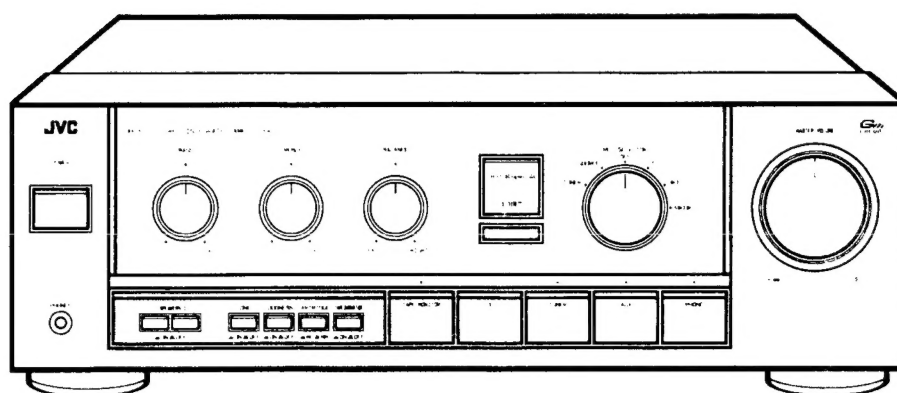


# JVC

## SERVICE MANUAL

### STEREO INTEGRATED AMPLIFIER

MODEL No. **AX-511BK**



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## Safety Precautions

1. The design of this product contains special hardware and may circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (  $\triangle$  ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

### 5. Leakage current check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

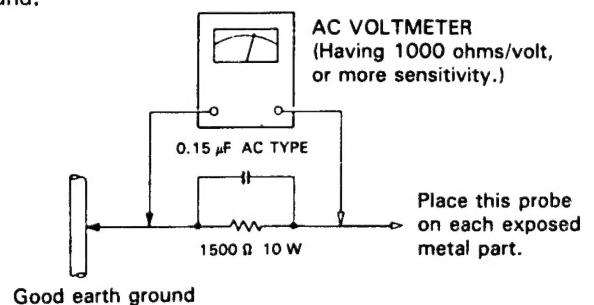
Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500  $\Omega$  10 W resistor paralleled by a 0.15  $\mu$ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



## Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

# Specifications

## AX-511BK

### OVERALL CHARACTERISTICS

#### Output power:

120 watts per channel into 4 ohms at 1 kHz (DIN).

80 watts per channel into 8 ohms at 1 kHz (DIN).

**75 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion. (U.S.A. and Canada only)**

75 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003% total harmonic distortion. (measured by JVC Audio Analyzer System)

Total harmonic distortion	: 0.007% (20 Hz — 20 kHz, 8 ohms) at 75 watts
Intermodulation distortion	: 0.007% (60 Hz : 7 kHz = 4 : 1, 8 ohms) at 75 watts
Power band width	: 5 Hz — 50 kHz (IHF, 0.05%, 8 ohms both channels driven)
Frequency response	: 5 Hz — 80 kHz +0, -3 dB (8 ohms)
Damping factor	: 90 (1 kHz, 8 ohms)
Input terminals	
Input sensitivity/impedance (1 kHz)	
PHONO (MM)	: 2.5 mV/47 kohms
PHONO (MC)	: 200 $\mu$ V/100 ohms
CD/AUX/	: 200 mV/43 kohms
TUNER/TAPE 1, 2	
Signal-to-noise ratio	
PHONO (MM)	: 85 dB ('66 IHF)
PHONO (MC)	: 66 dB ('66 IHF)
CD/AUX/	: 104 dB ('66 IHF)
TUNER/TAPE 1, 2	
PHONO (MM)	: 81 dB ('78 IHF)
(REC OUT)	
PHONO (MC)	: 73 dB ('78 IHF)
(REC OUT)	
CD/AUX/	: 76 dB ('78 IHF)
TUNER/TAPE 1, 2	
(SP OUT)	
PHONO (MM)	: 67 dB (DIN)
CD/AUX/	: 68 dB (DIN)
TUNER/TAPE 1, 2	
Tone controls	: TREBLE: +8 $\pm$ 1 dB -8 $\pm$ 1 dB (at 10 kHz) BASS: +8 $\pm$ 1 dB -8 $\pm$ 1 dB (at 100 Hz)
Loudness controls	: +6 dB (at 100 Hz)
(Volume control at -30 dB position)	

**EQUALIZER**

PHONO overload

capacity

PHONO (MM) : 100 mV (0.02% THD)

PHONO (MC) : 8 mV (0.04% THD)

PHONO RIAA

deviation

PHONO (MM) :  $\pm 0.3$  dB (20 Hz — 20 kHz)PHONO (MC) :  $\pm 0.5$  dB (20 Hz — 20 kHz)

Recording output

Output level/

impedance

TAPE REC-1, 2 : 200 mV/Maximum  
1 kohms**GENERAL**

Dimensions

: 435 (W) x 147 (H)  
x 356 (D) mm  
(17-3/16" x 5-13/16"  
x 14-1/16")

Weight

: 9.3 kg (20.5 lbs.)

Design and specifications subject to change  
without notice.**POWER SPECIFICATIONS**

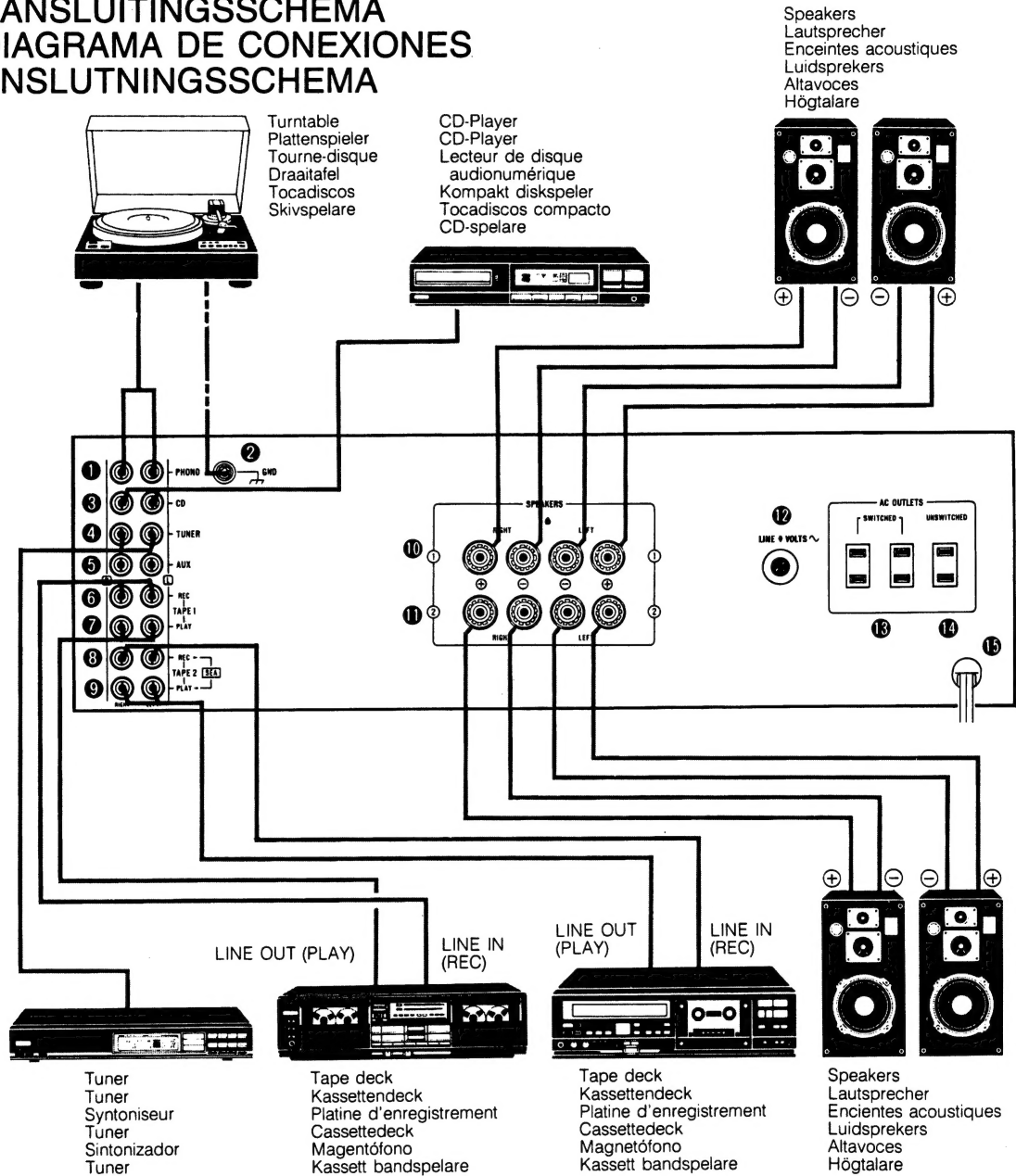
Areas	Line voltage & frequency	Power consumption
		AX-511BK
U.S.A.	AC 120 V $\sim$ , 60 Hz	400 watts/ 500 VA
Canada		
U.K.	AC 240 V $\sim$ , 50 Hz	680 watts
Australia		
Continental Europe	AC 220 V $\sim$ , 50 Hz	290 watts
Other areas	AC 110/127/220/240 V $\sim$ selectable, 50/60 Hz	

**OPEN-AIR STEREO HEADPHONES HA-CD7**

The JVC HA-CD7 Open-Air high-quality Stereo Headphones (optionally available) are recommended for use with this unit.



CONNECTION DIAGRAM  
ANSCHLUSSDIAGRAMM  
SCHEMA DE RACCORDEMENTS  
AANSLUITINGSSCHEMA  
DIAGRAMA DE CONEXIONES  
ANSLUTNINGSSCHEMA



## REAR PANEL

- ① PHONO terminals
  - ② GND terminal  
If your turntable has a ground lead, connect it to the GND terminal.
  - ③ CD terminals
  - ④ TUNER terminals
  - ⑤ AUX terminals
  - ⑥ TAPE 1 REC terminals
  - ⑦ TAPE 1 PLAY terminals
  - ⑧ TAPE 2 REC terminals
  - ⑨ TAPE 2 PLAY terminals
  - ⑩ SPEAKERS 1 terminals
  - ⑪ SPEAKERS 2 terminals
  - ⑫ AC line voltage selector (LINE ↓ VOLTS ~)\*
  - ⑬ SWITCHED AC OUTLETS\*\*
  - ⑭ UNSWITCHED AC OUTLET\*\*
  - ⑮ Power cord
- (\*Not provided on units for U.S.A., Canada, Continental Europe, the United Kingdom and Australia.)  
(\*\*Not provided on units for Continental Europe, the United Kingdom and Australia.)

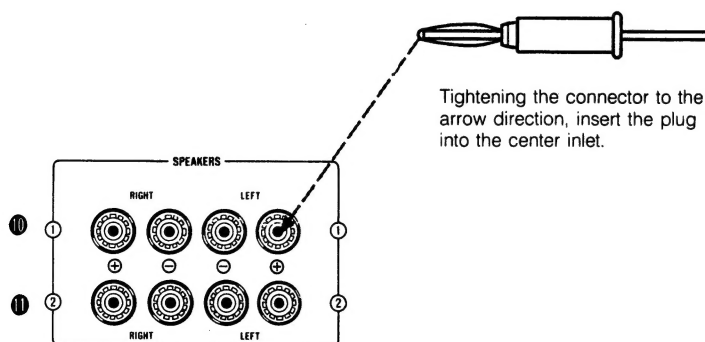
### Notes:

1. Switch the power off when connecting any component.
2. Connect source components with left and right channels connected correctly. Reversed channels may degrade the stereo effect.
3. Connect speakers with correct polarity; (+) to (+) and (-) to (-). Reversed polarity may degrade the stereo effect.
4. Connect plugs or wires firmly. Poor contact may result in hum.
5. Do not connect the power plugs of components which have a total power consumption exceeding the value indicated on the rear panel.
6. Use speakers with the correct impedance. The correct impedance is indicated on the rear panel of the AX-511BK/AX-611BK.
7. The SWITCHED AC outlets are switched off when the front-panel POWER button is switched off.
8. The UNSWITCHED AC outlet is not switched off when the front-panel POWER button is switched off.

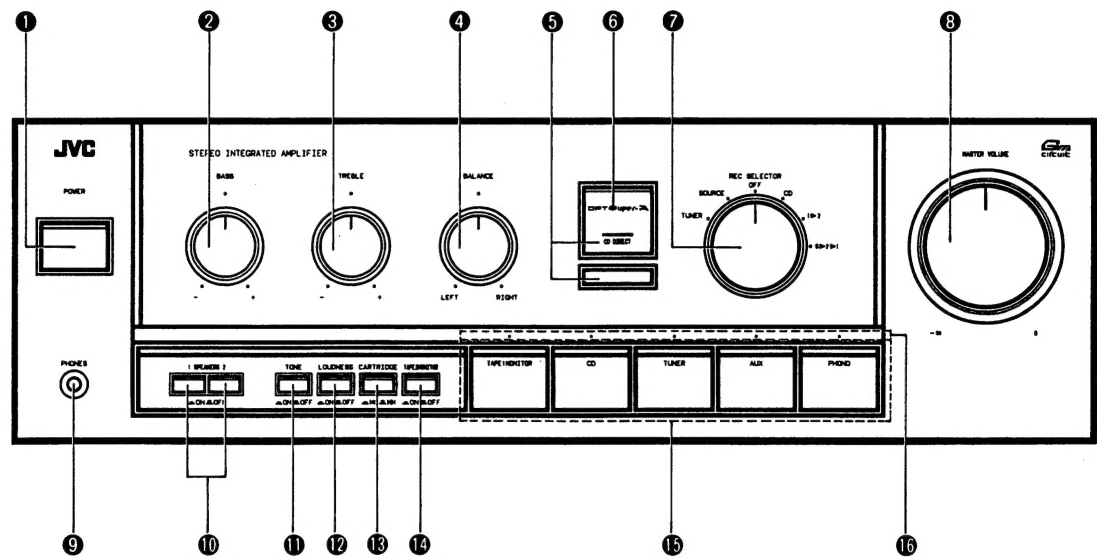
## RÜCKSEITE

- ① Plattenspieler-Anschlüsse (PHONO)
  - ② Erdungsanschluß (GND)  
Hier das Erdungskabel des Plattenspielers anschließen, falls vorhanden.
  - ③ CD-Anschlüsse
  - ④ Tuner-Anschlüsse (TUNER)
  - ⑤ AUX-Anschlüsse
  - ⑥ Tonband 1-Aufnahmeanschlüsse (TAPE 1 REC)
  - ⑦ Tonband 1-Wiedergabeanschlüsse (TAPE 1 PLAY)
  - ⑧ Tonband 2-Aufnahmeanschlüsse (TAPE 2 REC)
  - ⑨ Tonband 2-Wiedergabeanschlüsse (TAPE 2 PLAY)
  - ⑩ Lautsprecher-1-Anschlüsse (SPEAKER 1)
  - ⑪ Lautsprecher 2-Anschlüsse (SPEAKERS 2)
  - ⑫ Netzspannungswähler (LINE ↓ VOLTS ~)\*
  - ⑬ Beschaltete Netzausgänge (SWITCHED AC OUTLETS)\*\*
  - ⑭ Unbeschalteter Netzausgang (UNSWITCHED AC OUTLET)\*\*
  - ⑮ Netzkabel
- (\*Nicht vorhanden an Geräten für USA, Kanada, Kontinental-Europa Großbritannien und Australien.)  
(\*\*Nicht vorhanden an Geräten für Kontinental-Europa, Großbritannien und Australien.)

Connecting to speaker terminals with BANANA plug.  
(Only for USA and Canada)



FRONT PANEL  
 FRONTPLATTE  
 PANNEAU AVANT  
 VOORPANEEL  
 PANEL DELANTERO  
 FRAMPANEL



## FRONT PANEL

### 1 POWER

Press this button to turn the power on.  
To turn the power off, press it again.

#### Notes:

- When power is not supplied to this amplifier for 2 — 3 days, the source select button pressed before the power was switched off may be lost when the power is switched on again. If this happens, set the buttons, etc. again.
- An electronic source selector is used in this unit. When the POWER button is first switched on, two or more sources or no source may be selected. Make sure to input the source select data by pressing one of the source selectors.
- If the POWER button is pressed repeatedly to switch on and off too quickly, the same phenomenon as the above will occur.

### 2 BASS

Turn clockwise to boost bass response and counterclockwise to decrease it.

### 3 TREBLE

Turn clockwise to boost treble response and counterclockwise to decrease it.

### 4 BALANCE

Balances the volume between the left and right speakers. Usually set to the center click position.

### 5 CD DIRECT and indicator

Press this button to enjoy listening to the CD with good sound quality. The indicator lights and the signal fed from the CD terminals is directly connected to the volume, bypassing the circuits on the way, thus allowing you to enjoy listening to an improved sound quality.

#### Note:

- While the CD DIRECT button is pressed, the reproduced sound does not change even if the source selector (including TAPE 2 MONITOR) and BALANCE volume are operated, press the CD DIRECT button again to turn the indicator off when using these.

### 6 OPT Super-A indicator

Pressing the POWER button to on, this indicator lights.

### 7 REC SELECTOR

**TUNER:** Set to this position to record broadcasts while listening to another source.

**SOURCE:** Set to this position to record from sources connected to the PHONO, CD, TUNER or AUX terminals.

**OFF:** Set to this position when you are not recording or dubbing.

**CD:** Set to this position to record CD while listening to another source.

**1 ▶ 2:** Set to this position to dub from the deck TAPE 1 to TAPE 2.

**S ▶ 2 ▶ 1:** Set to this position to dub from the deck TAPE 2 to TAPE 1 and record the source selected with the SOURCE SELECTOR onto the deck TAPE 2.

### 8 MASTER VOLUME



Controls the volume of the speakers and headphones.

### 9 PHONES (Headphones jack)


Plug stereo headphones into this jack for private listening.


If you want to listen to sound from the headphone only, press the SPEAKERS buttons to "OFF".

### 10 SPEAKERS

Press to switch the speakers connected to the SPEAKERS 1 or 2 terminals on (  ) and off (  ).


### 11 TONE

**ON (  ):** Press to adjust the tone with the BASS and TREBLE controls.


**DEFEAT (  ):** Press to this position to obtain a standard (flat) frequency response.


### 12 LOUDNESS

**ON (  ):** To compensate for the ear's lower sensitivity at low listening levels.


**OFF (  ):** To bypass the LOUDNESS circuit.


### 13 CARTRIDGE

**MC (  ):** Press in when using an MC cartridge having an output of less than 0.5 mV.

**MM (  ):** Press again when using an MM or MC cartridge having an output of more than 0.5 mV.

### 14 TAPE 2 MONITOR

**ON (  ):** Set to this position to listen to the tape deck connected to the TAPE 2 terminals of this unit. If your tape deck is of the 3-head type, you can monitor the recorded sound while recording by setting this button to ON.

**OFF (  ):** Keep this button set to this position, except when you want to listen to the tape deck connected to the TAPE 2 terminals of this unit.

### 15 Source selector

#### TAPE 1 MONITOR

Press to listen to a tape deck connected to the TAPE 1 terminals.

#### CD

Press to listen to the source connected to the CD terminals.

#### TUNER

Press to listen to radio broadcasts by a tuner connected to the TUNER terminals.

#### AUX

Press to listen to the source connected to the AUX terminals.

#### PHONO

Press to listen to records played by a turntable connected to the PHONO terminals.

### 16 Source indicator

The indicator corresponding to the source select button pressed lights.

## OPERATION

Before operation, always be sure to set **VOLUME** at minimum.

When the volume is increased after selecting a source position with no equipment connected to the input terminal, other connected devices (such as speakers) may be adversely affected by external noise and inductive hum.

### Listening to broadcasts

1. Connect a tuner to the TUNER terminals on the rear panel.
2. Press the POWER button on.
3. Press the TUNER button and make sure that the TAPE 1 MONITOR and TAPE 2 MONITOR buttons are set to off.
4. Select the speaker system with the SPEAKERS switches.
5. Operate the tuner according to its instruction manual.
6. Adjust the VOLUME, LOUDNESS, BALANCE and BASS/TREBLE controls.

### Listening to records

1. Connect a turntable to the PHONO terminals on the rear panel.
2. Press the POWER button on.
3. Set the CARTRIDGE button of this unit according to the cartridge in use.
4. Press the PHONO button and make sure that the TAPE 1 MONITOR and TAPE 2 MONITOR buttons are set to off.
5. Select the speaker system with the SPEAKERS switches.
6. Operate the turntable according to its instruction manual.
7. Adjust the VOLUME, LOUDNESS, BALANCE and BASS/TREBLE controls.

### Listening to tapes

1. Connect a tape deck to the PLAY terminals of TAPE 1 or TAPE 2.
2. Press the POWER button on.
3. Press the TAPE 1 MONITOR button to play back the TAPE 1 deck. For playback of the TAPE 2 deck, press the TAPE 2 MONITOR button to ON (■).
4. Select the speaker system with the SPEAKERS switches.
5. Operate the tape deck for playback according to its instruction manual.
6. Adjust the playback sound controls as required.

#### Note:

- Do not place the tape deck directly on the amplifier, because it may cause the amplifier to malfunction.

### Using stereo headphones

Stereo headphones can be plugged into the front panel jack. Plugging headphones into the PHONES jack does not switch off the speaker sound.

### Recording tapes

#### — Recording from records —

1. Connect a tape deck to the REC terminals of the TAPE 1 or TAPE 2 terminals.
2. Press the POWER button on.
3. Select a speaker system if you wish to hear the sound while recording.
4. Press the PHONO button.
5. Operate the turntable.
6. Operate the tape deck for recording.

#### — Recording from other sources (TUNER, CD, AUX) —

Press the TUNER, CD or AUX button to record radio broadcasts, or the source connected to the CD, AUX terminals.

All other operations are identical to when recording from disc source.

#### Note:

- To record from CD, turn the source selector to "CD". It is possible to monitor the high quality sound by pressing the CD DIRECT button. When monitoring other sources while recording, press the CD DIRECT button again to turn the indicator off.

#### — Recording from other sources (PHONO, TUNER, AUX) while listening to the CD —

1. Select the source that you wish to record to from among the PHONO, TUNER and AUX button.
2. Operate the tape deck for recording.
3. Press the CD DIRECT button.

### Tape dubbing

Dubbing from the TAPE 1 to TAPE 2 is carried out as follows:

1. Press the TAPE 1 MONITOR button.
2. Play back the TAPE 1 deck.
3. Operate the TAPE 2 deck for recording.

You can perform tape dubbing while listening to the CD by pressing the CD DIRECT button in addition to the above operations.

#### Notes:

- The sound you hear from the speakers or headphones is the source sound, not that being recorded on the tape.
- The VOLUME control of this amplifier has no effect on the recording level. Adjust the recording level with the controls on the tape deck.

### How to operate the monitor while recording on the tape deck

1. Connect a 3-head tape deck to the TAPE 1 or TAPE 2 terminals.
2. Make sure to connect the signal cords to the PLAY and REC terminals.
3. Select the source from which you want to record by depressing the source select button on this unit.
4. Operate the tape deck for recording as described in its operating manual.
5. By playing the source component, you can record on the tape deck.
6. While recording on the tape deck, the recorded sound can be heard by depressing the TAPE 1 MONITOR or TAPE 2 MONITOR button on this unit.

### Use of S.E.A. Graphic Equalizer

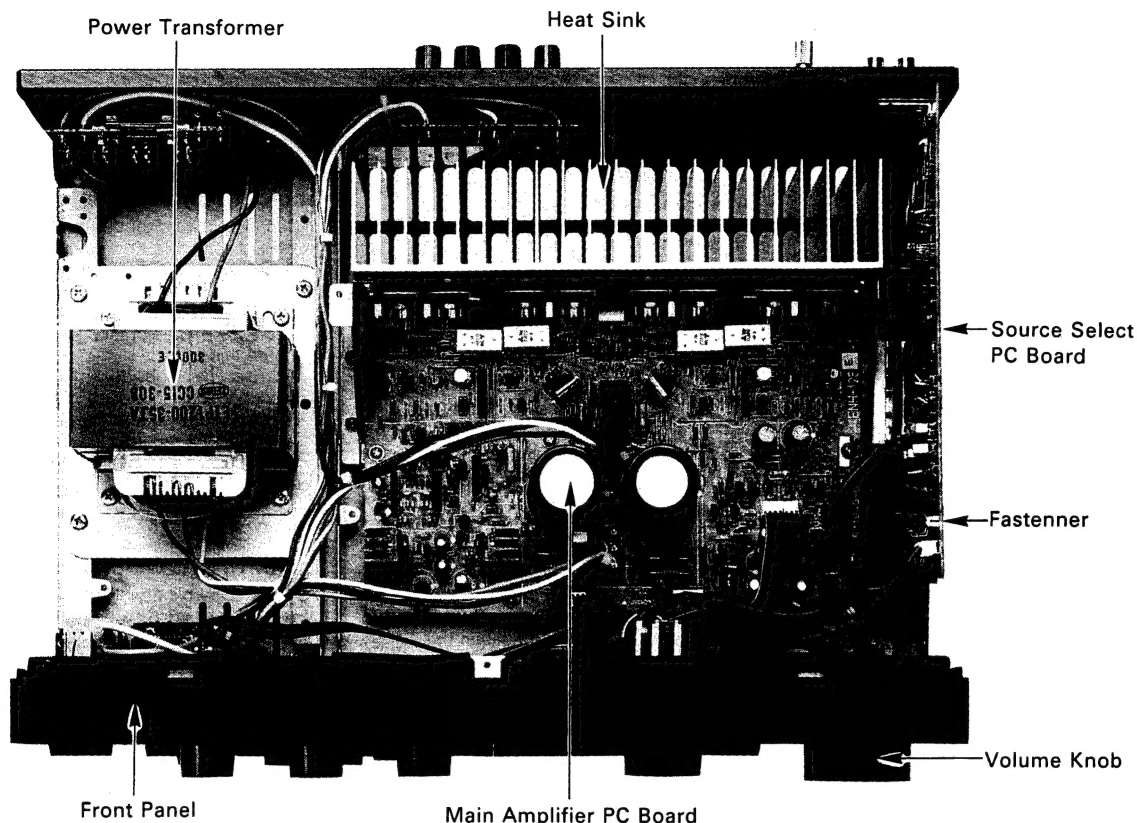
The S.E.A. Graphic Equalizer is JVC's exclusive tone control system. By allowing you to independently boost or lower the response of finely divided sections of the frequency spectrum: the S.E.A. gives you much greater control over the sound quality of your stereo system. With an optionally available S.E.A. Graphic Equalizer, you can tailor the sound to your own taste for different types of music or to compensate for the particular acoustic characteristics of your audio components and listening room.

The TAPE 2 terminals of the AX-511BK or AX-611BK can be used for connecting the S.E.A. Graphic Equalizer.

#### Note:

- Even if the S.E.A. Graphic Equalizer is operated while the CD DIRECT button is pressed, reproduced sound is neither adjusted nor compensated. When using the S.E.A. Graphic Equalizer, press the CD DIRECT button once again to turn the indicator off.

## Removal Procedures



### ■ Removing the Top Cover

1. Remove six screws.
2. Remove the top cover by lifting up its rear section and pulling it backward while holding it on incline.

### ■ Removing the Front Panel

1. Remove the top cover.
2. Pull out the volume knob.
3. Remove three plastic rivets on the upper part of the front panel and three screws from the lower part.

### ■ Removing the Bottom Cover

1. Remove 20 screws fixing the bottom cover.

### ■ Removing the Source Select PC Board

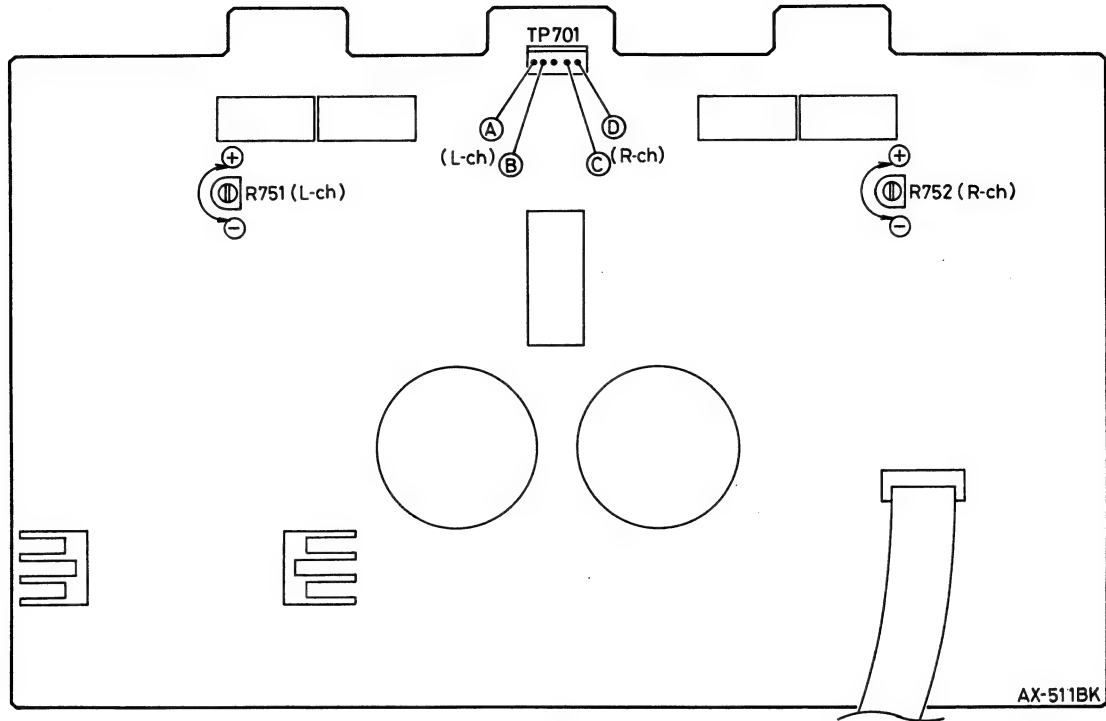
1. Remove the top cover.
2. Remove four screws fixing the pin jacks.
3. Remove the fastener from the source select pc board. (See above figure.)
4. Pulling the source select pc board toward you.

### ■ Removing the Power Transistors

1. Remove the top cover.
2. Remove the bottom cover.
3. Remove the retaining screw from the defective power transistor and replace it.

# Adjustment Procedures

## ■ Power Amplifier Idling Adjustment



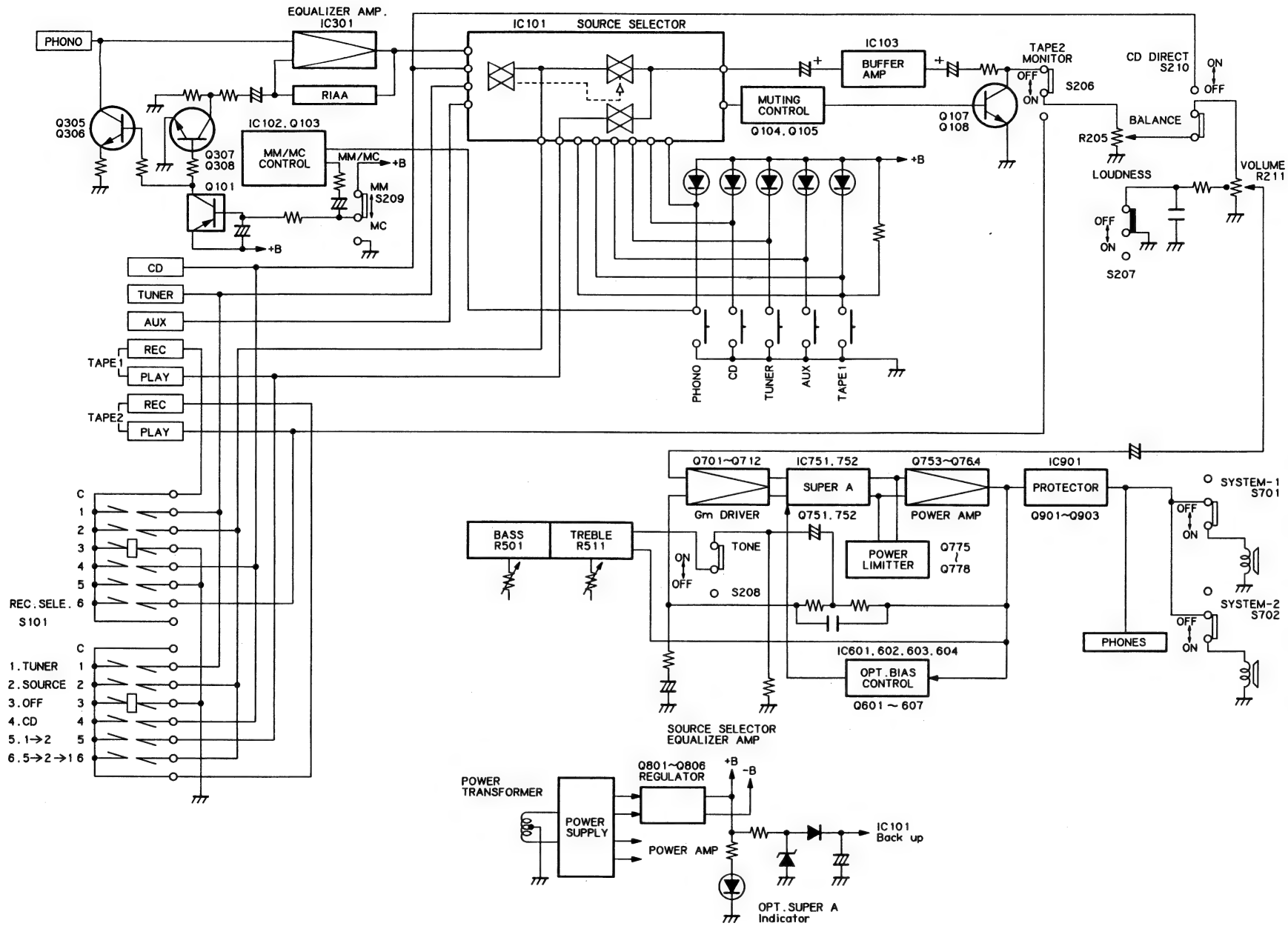
1. Before turning on the power, turn the semi-fixed resistors (R751 for L channel and R752 for R channel) of the power amplifier circuit board fully counterclockwise.
2. Adjust the semi-fixed resistor (R751 and R752) so that the voltage at the following test points of the power amplifier circuit board is within a range of 1 ~ 3 mV after the power is turned on.  
 L channel : Measure the voltage between test point ① (emitter of Q901) and output at the test point ②.  
 R channel : Measure the voltage between test point ③ (emitter of Q902) and output at the test point ④.

3. Readjust resistors R751 and R752 about 10 minutes after the power is turned on (the heatsink temperature must be sufficiently high) so that the voltage at the test points becomes 11 mV. Confirm that the voltage does not vary when the heatsink temperature increases further.

**Note :** Be sure to perform the measurement with the probes and cabinet of the measuring equipment separated from the grounding terminals of AX-511BK or other measuring equipment.

Since this set is a parallel balanced (push-pull) amplifier, check idling current of all the transistors after the above adjustment is performed.

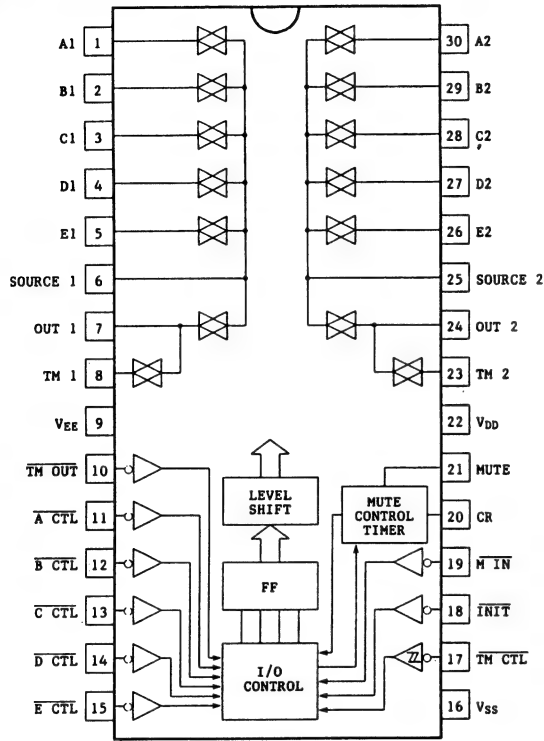
## Block Diagram



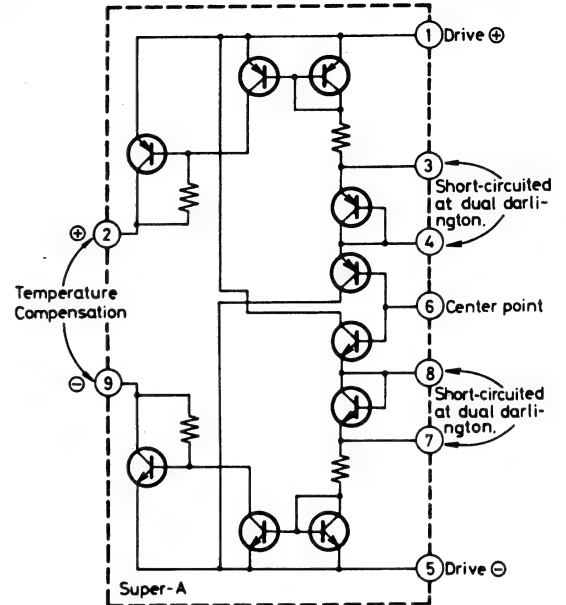


# Internal Block Diagrams of ICs

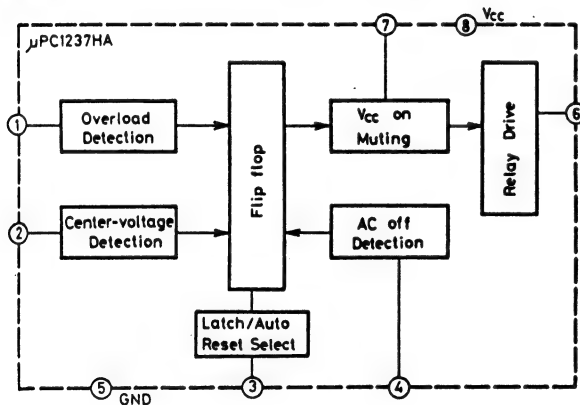
## ■ LC7818 (IC101): Analog Switch



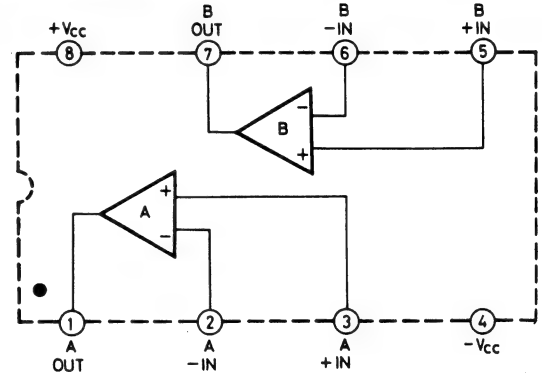
## ■ VC5022 [X, Y] (IC751, IC752): Super-A



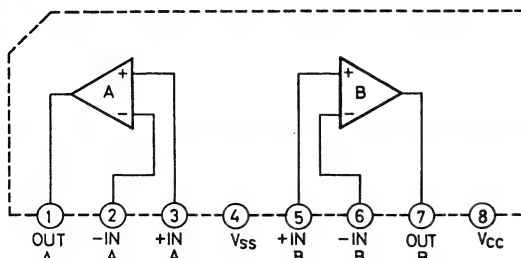
## ■ $\mu$ PC1237HA (IC901): Relay Driver



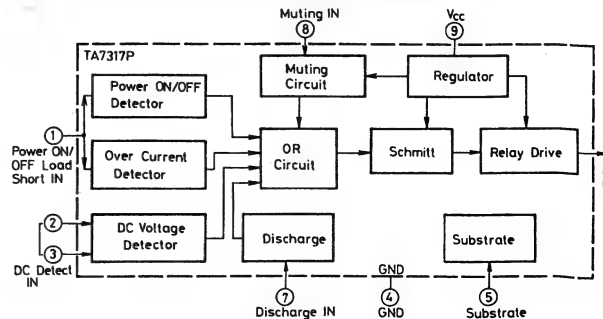
## ■ NJM4560DD (IC301): Dual OP Amp.



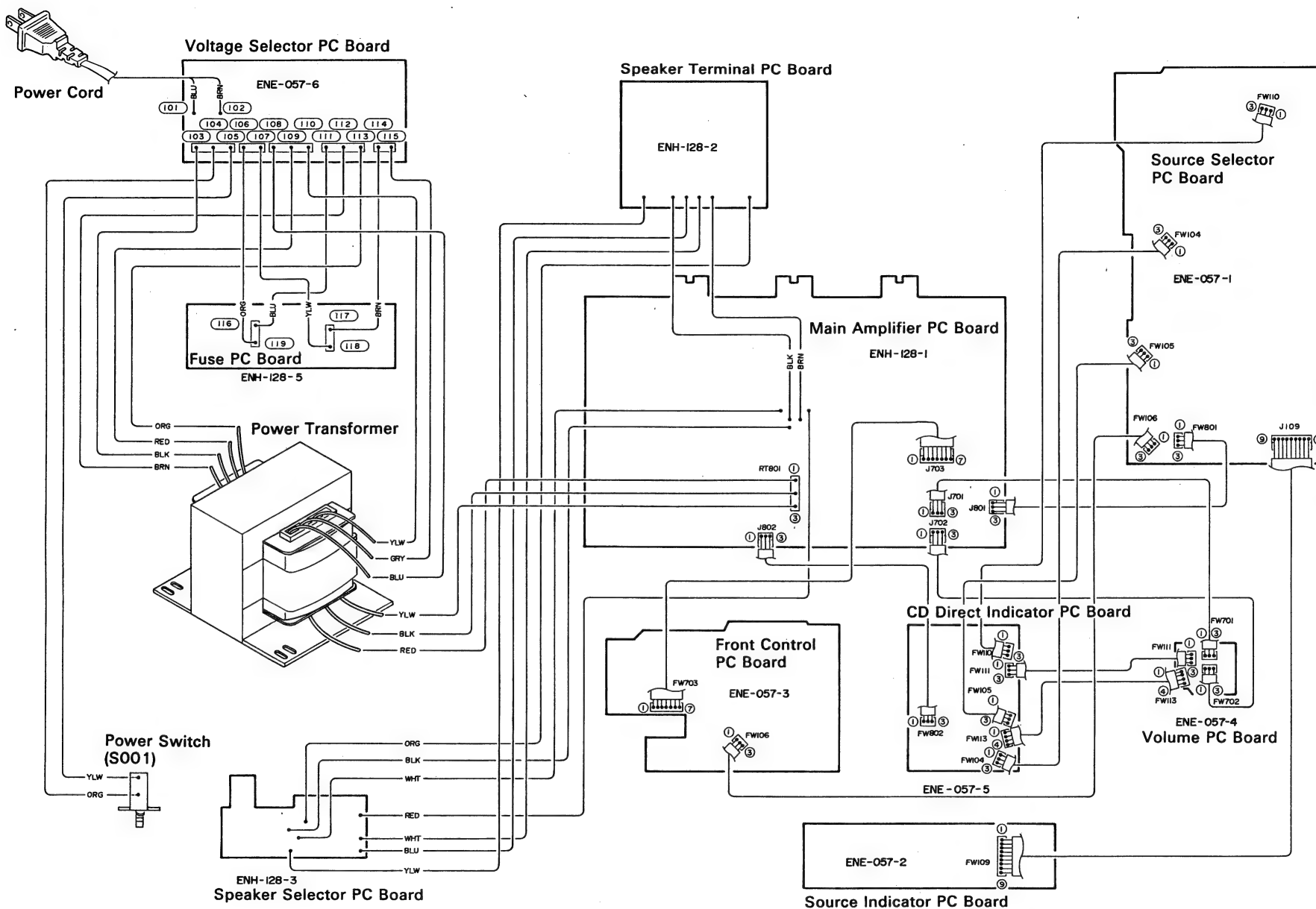
## ■ VC4580LD (IC103) : Dual OP Amp. ■ BA15218N (IC601, 602): Dual OP Amp.



## ■ TA7317P (IC102): Driver

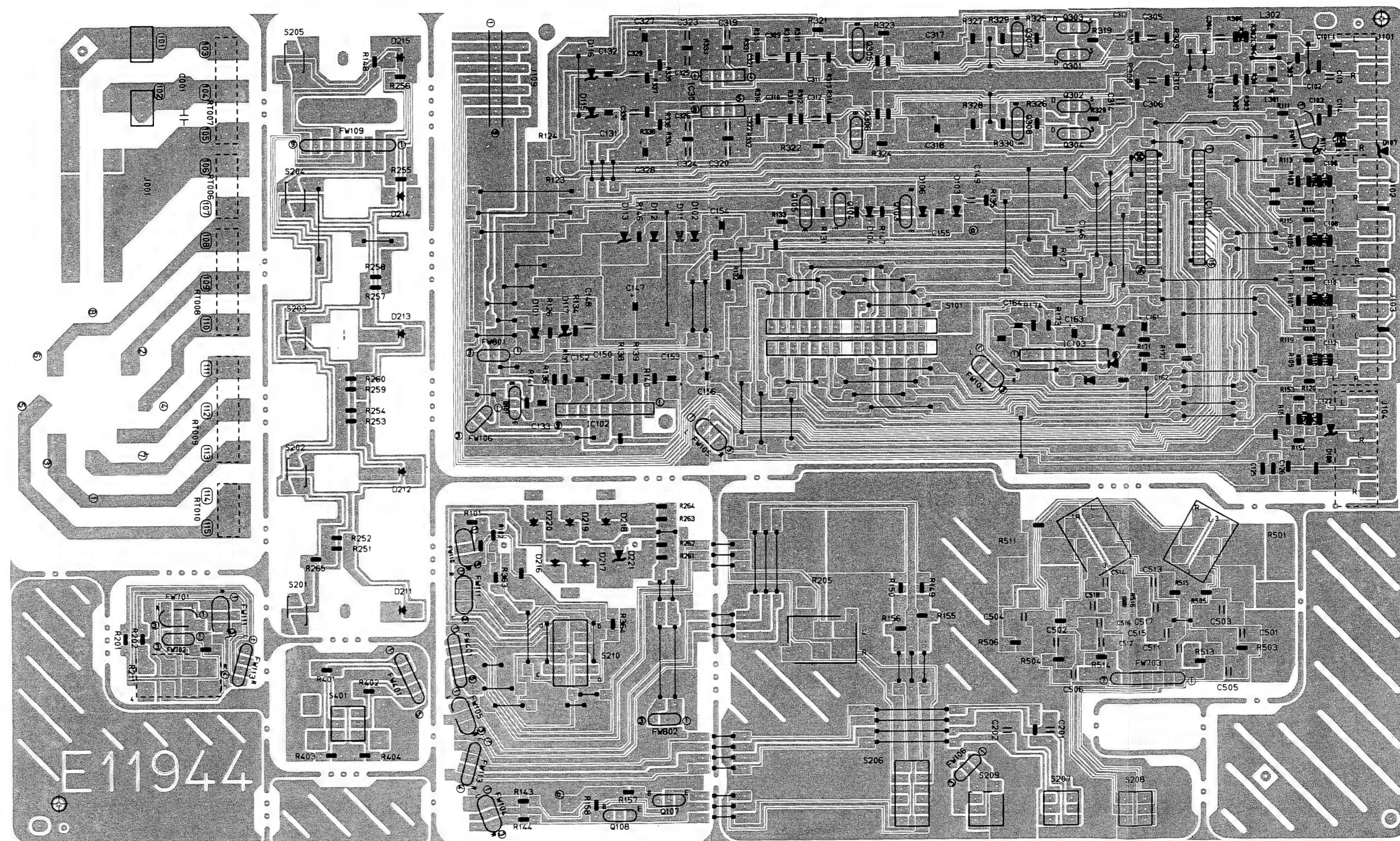


# Connection Diagram



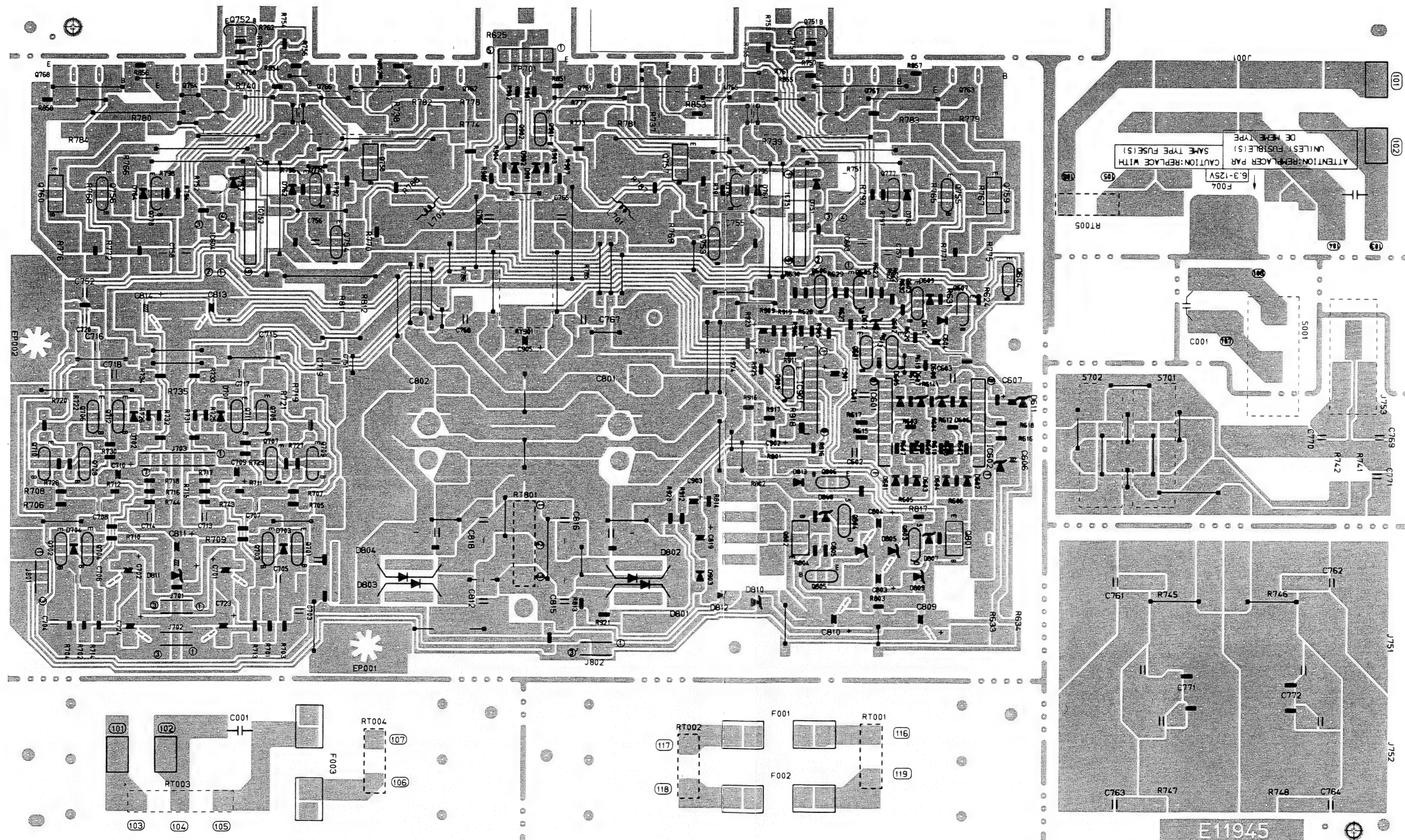
## Printed Circuit Boards

### ■ Source Select PC Board (ENE-057)

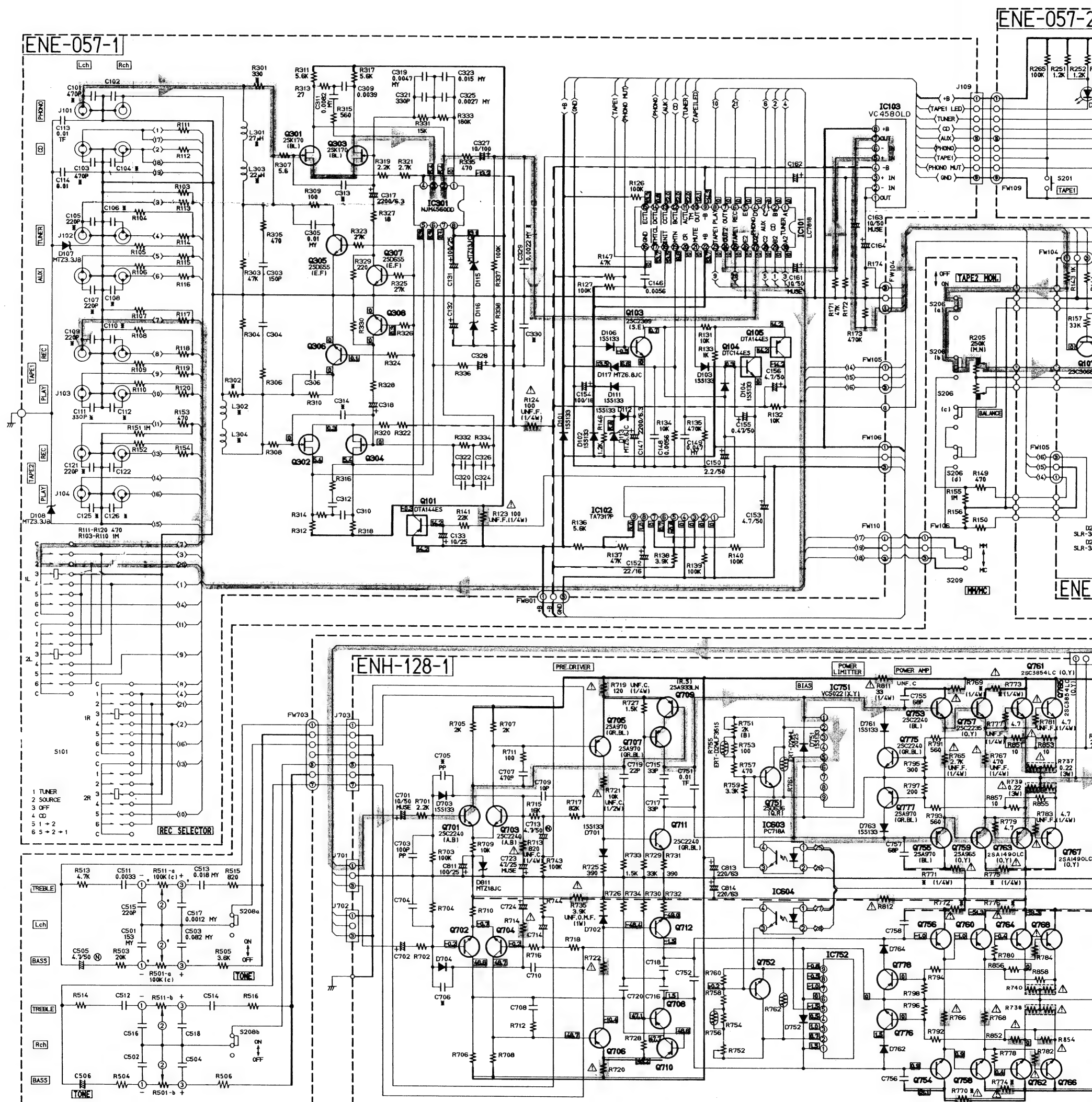




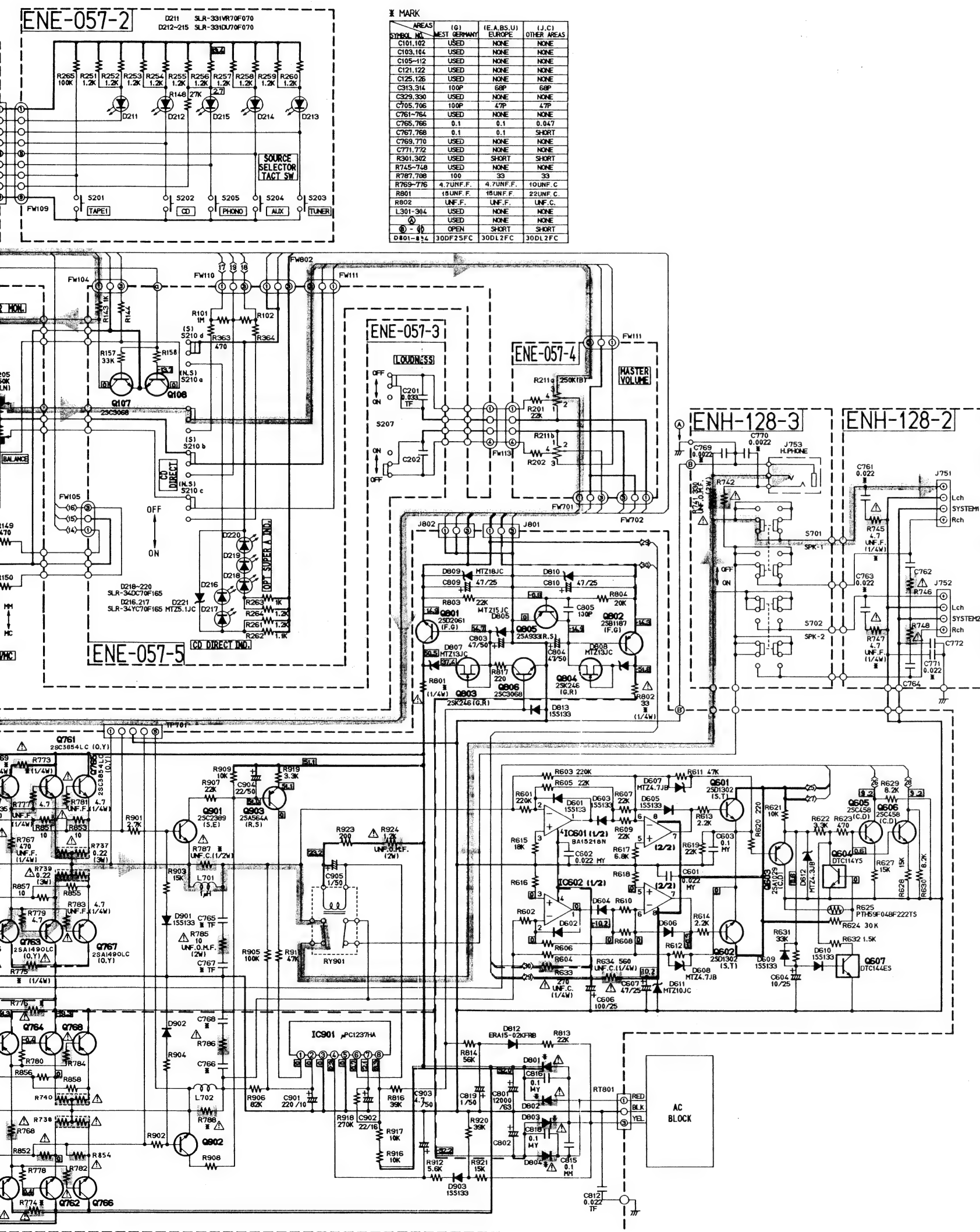
### ■ Main Amplifier PC Board (ENH-128)



### ■ Source Select and Main Amplifier Section

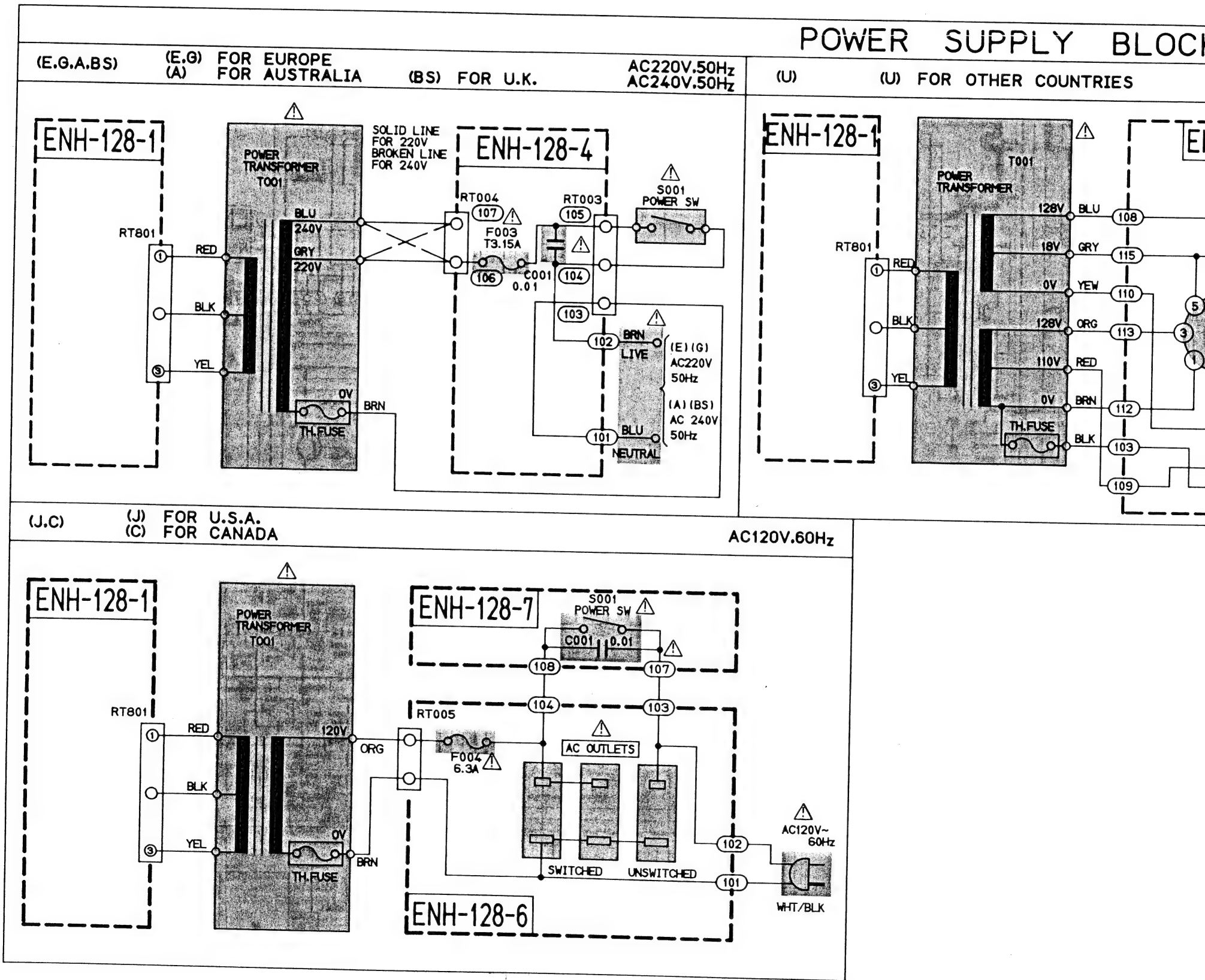






■ Power Supply Section

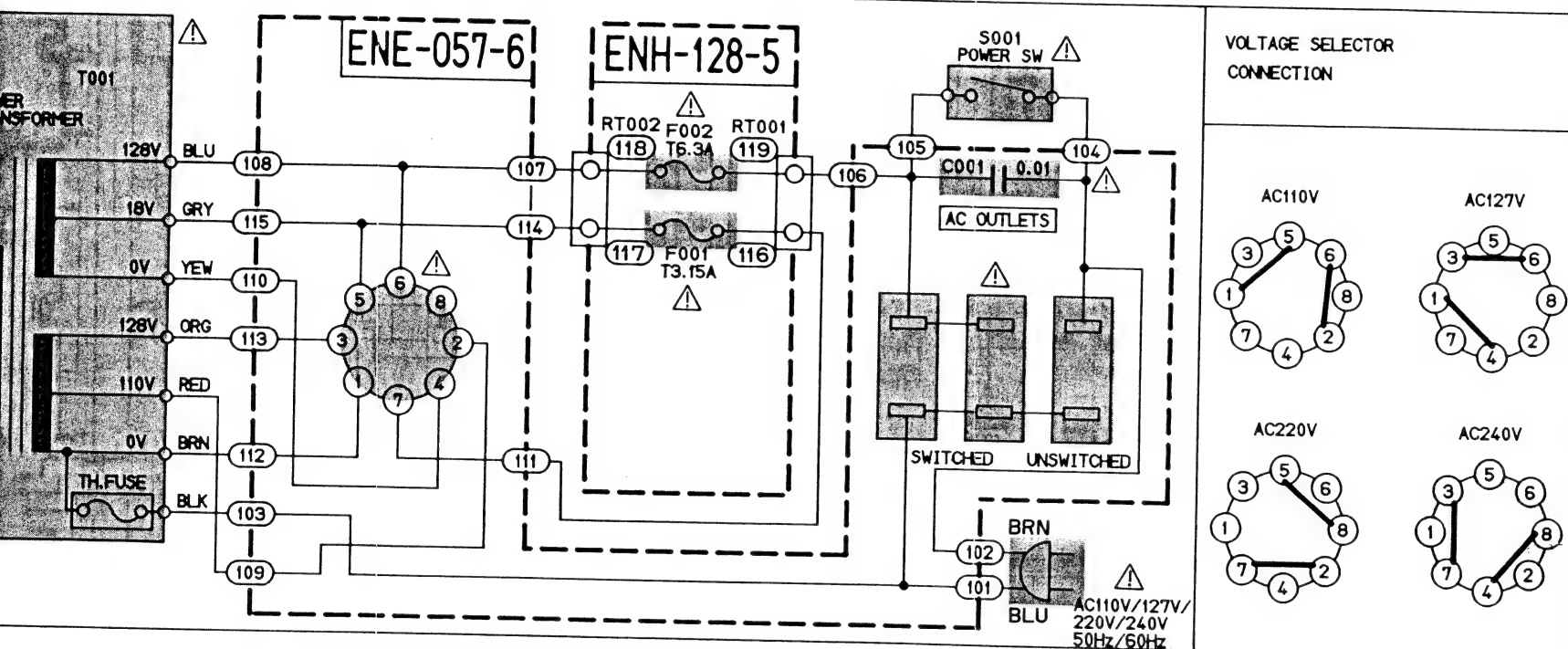
- Notes:
- 1. ——— indicates + B power supply.
  - 2. - - - indicates - B power supply.
  - 3. ■■■■ indicates signal path.
  - 4. ■■■■ shows DC voltage to the chassis with no signal input.
  - 5. When replacing the parts in the darkened are (■■■■) and those marked with ⚠, be sure to use the designated parts to ensure safety.
  - 6. This is the standard circuit diagram.  
The design and contents are subject to change without notice.



# SUPPLY BLOCK

OTHER COUNTRIES

AC110V/127V/220V/240V.50/60Hz



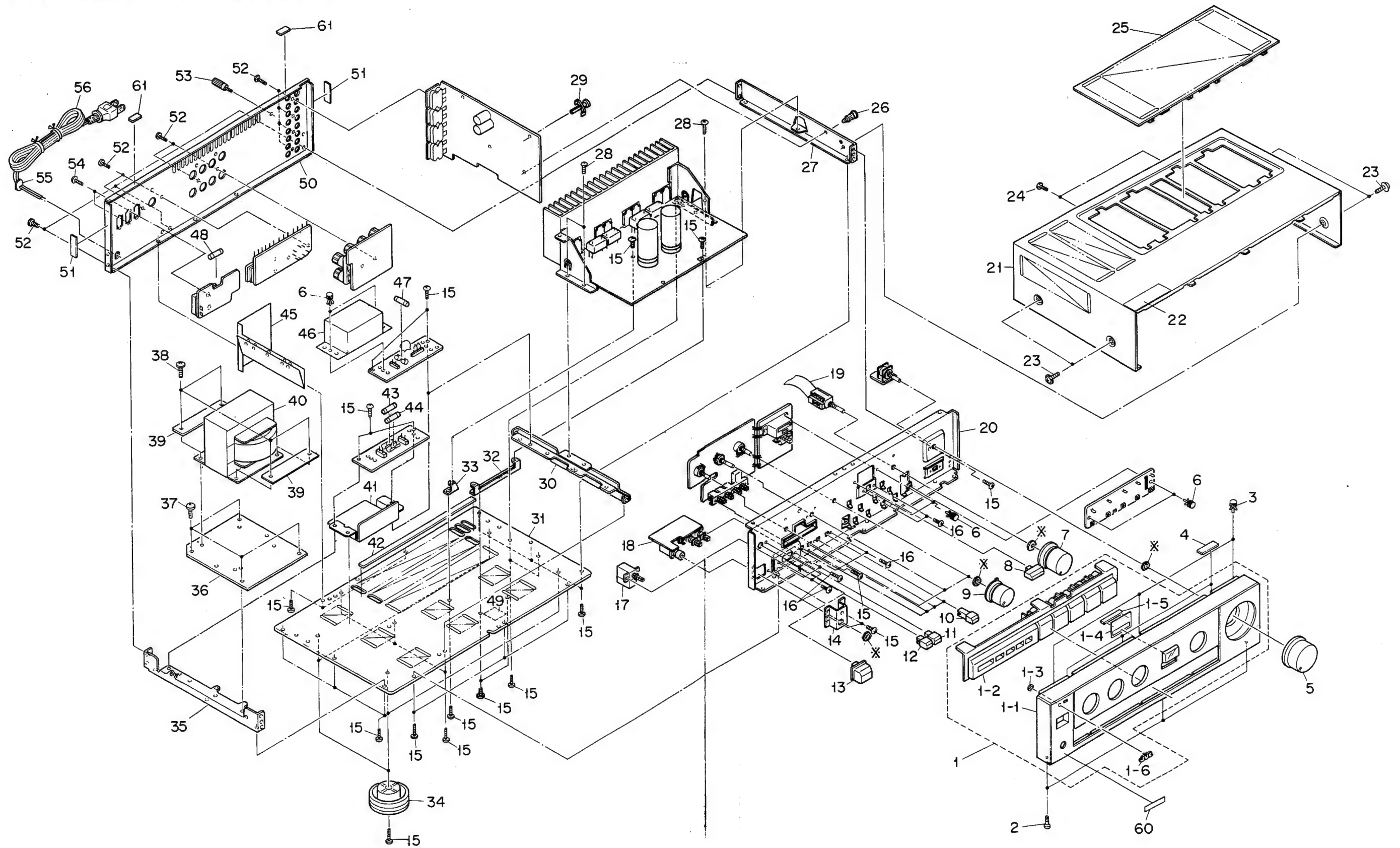


# PARTS LIST

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# Exploded View and Parts List



※ mark indicates attached part.

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-AX511BKE	Front Panel Ass'y	1		
	1-1	E26392-001	Front Panel	1		
	1-2	E26332-003	Push Button Ass'y	1		
	1-3	E60912-003	Speed Nut	1		
	1-4	E75327-001	Indicator Sheet	1		
	1-5	EXO032003N10S02	Spacer	1		
	1-6	E72968-001	JVC Mark	1		
	2	SBSG3006M	Screw	3		
	3	E48729-009	Plastic Rivet	3		
	4	EXO060007N40S	Felt Spacer	3		
	5	E305980-001	Volume Knob	1		
	6	E48729-008	Plastic Rivet	4		J,C
		E48729-008	Plastic Rivet	6		Except J,C
	7	E305982-001	Knob	1		
	8	E75117-001	Push Button	1		
	9	E305981-001	Knob	3		
	10	E75182-001	Push Button	4		
	11	E75073-002	Push Button	1		
	12	E75073-001	Push Button	1		
	13	E75079-001	Power Button	1		
	14	E75186-001	Headphone Bracket	1		
	15	SBSG3008CC	Screw	30		J,C
		SBSG3008CC	Screw	34		Except J,C
	16	SBST3006CC	Screw	8		
	17	E71005-001	Switch Cover	1		Except J,C
⚠	18	QSP1106-005	Push Switch	1	S001	Except J,C,BS
		QSP1106-005BS	Push Switch	1	S001	BS
	19	QSR2B16-E02	Flex Rotary	1		
	20	E11954-001	Front Bracket	1		
	21	E26269-001	Metal Cover	1		J,C,G,A
	22	E26269-002	Metal Cover	1		E,EF,U,BS
	23	E67000-005	Caution Label	1		
	24	E61660-004	Special Screw	4		
	25	SBSG3008M	Screw	2		
		E24134-008	Grill	1		E,EF,U,BS
	26	E303216-001	Fastener	1		
	27	E305801-001	Side Bracket	1	Right	
	28	GBSB3008CC	Screw	3		
	29	E69384-002	Fastener	1		
	30	E305802-001	Center Bracket	1		
	31	E26268-002	Bottom Cover	1		
	32	E75341-001	Circuit Board Bracket	1		
	33	E68587-008	Bracket	1		
	34	E75088-001	Foot Ass'y	4		
	35	E305800-001	Side Bracket	1	Left	
	36	E305803-003	Trans Bracket	1		
	37	E65389-004	Special Screw	4		J,C
	38	E65389-004	Special Screw	4		J,C
		E65389-006	Special Screw	4		Except J,C
	39	E75419-001	Plate	2		Except J,C
⚠	40	ETP1200-35JA	Power Transformer	1	T001	J,C
⚠		ETP1200-35FA	Power Transformer	1	T001	U
⚠		ETP1200-35EA	Power Transformer	1	T001	E,EF,A,G
⚠		ETP1200-35EABS	Power Transformer	1	T001	BS
	41	E75439-001	Protect Cover	1		Except J,C
⚠	42	EXO255005N60S02	Spacer	1		
⚠	43	QMF51A2-3R15S	Fuse	1	F001	U
	44	QMF51A2-6R3S	Fuse	1	F002	U
	45	E305986-002	Protect Cover	1		Except U
		E306241-001	Protect Cover	1		U
⚠	46	E306171-001	Protect Cover	1		Except J,C
⚠	47	QMF51A2-3R15S	Fuse	1	F003	E,EF,A,G
⚠		QMF51E2-3R15BS	Fuse	1	F003	BS
⚠	48	QMF61U1-6R3	Fuse	1	F004	J,C
	49	E70281-001	Caution Label	1		J

⚠ Safety Parts

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	50	E70115-002	Caution Label	1		BS
		E26340-001	Rear Panel	1		J,C
		E26340-002	Rear Panel	1		U
		E26340-003	Rear Panel	1		Except J,C,U
	—	E303260-191	Rating Label	1		E,EF,G
	51	EXO040010R10S10	Spacer	2		
	52	E73273-001	Special Screw	13		
	53	E70078-001	GND Terminal	1		
	54	SDSB3008M	Screw	2		J,C,U
⚠	55	QHS3876-162	Cord Stopper	1		Except BS
⚠	56	QHS3876-162BS	Cord Stopper	1		BS
⚠		QMP1480-200	Power Cord	1		J,C
⚠		QMP7520-200	Power Cord	1		U
⚠		QMP3900-200	Power Cord	1		E,EF,G
⚠		QMP2560-244	Power Cord	1		A
⚠	57	QMP9017-008BS	Power Cord	1		BS
	58	E69589-010	Spacer	1		J
	59	E67199-001	Caution Label	2		J
	60	E65507-001	Caution Label	1		C
	61	E49267-001	Origin Marking Label	1		BS
		EXO050010N20S	Felt Spacer	2		

⚠ Safety Parts

## The Marks for Designated Areas

J.....the U.S.A.

G.....West Germany

C.....Canada

BS.....the U.K.

E,EF.....Continental Europe

U.....Other Countries

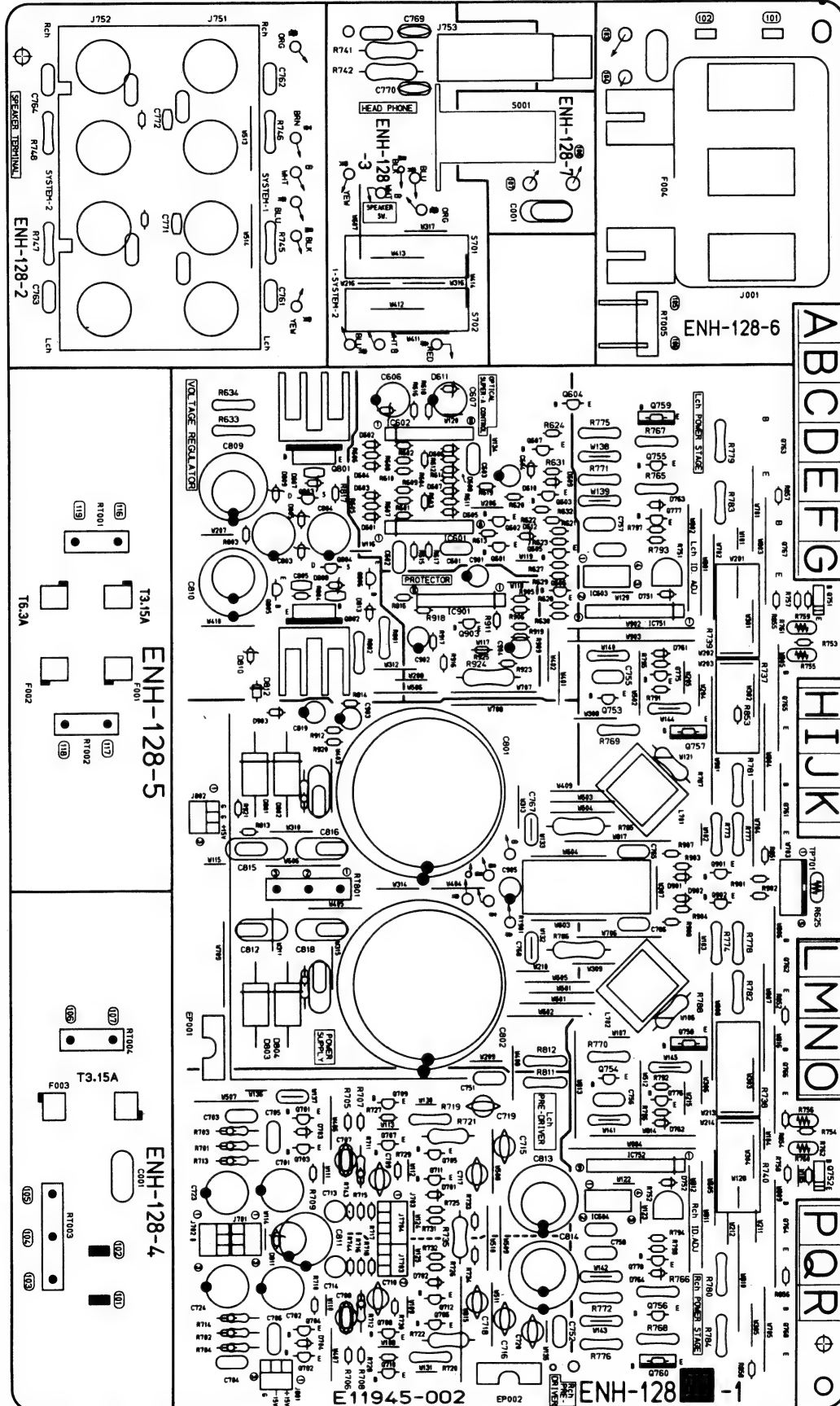
A.....Australia

No mark indicates all areas.

# Printed Circuit Board Ass'y and Parts List

## ■ ENH-128 □ Main Amplifier PC Board Ass'y

Note: ENH-128 □ varies according to the areas employed. See note (1) when placing an order.



## Note (1)

PC Board Ass'y	Designated Areas
ENH-128 <b>A</b>	Other Countries
ENH-128 <b>B</b>	Australia, Continental Europe
ENH-128 <b>C</b>	West Germany
ENH-128 <b>D</b> BS	the U.K.
ENH-128 <b>E</b>	the U.S.A., Canada

## Transistors

ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER
Q601	2SD1302(S,T)	SILICON	MATSUSHITA
Q602	2SD1302(S,T)	SILICON	MATSUSHITA
Q603	2SA1029(C,D)	SILICON	HITACHI
Q604	DTC114YS	SILICON	ROHM
Q605	2SC458(C,D)	SILICON	HITACHI
Q606	2SC458(C,D)	SILICON	HITACHI
Q607	DTC144ES	SILICON	ROHM
Q701	2SC2240(A,B)	SILICON	TOSHIBA
Q702	2SC2240(A,B)	SILICON	TOSHIBA
Q703	2SC2240(A,B)	SILICON	TOSHIBA
Q704	2SC2240(A,B)	SILICON	TOSHIBA
Q705	2SA970(GR,BL)	SILICON	TOSHIBA
Q706	2SA970(GR,BL)	SILICON	TOSHIBA
Q707	2SA970(GR,BL)	SILICON	TOSHIBA
Q708	2SA970(GR,BL)	SILICON	TOSHIBA
Q709	2SA933LN(R,S)	SILICON	ROHM
Q710	2SA933LN(R,S)	SILICON	ROHM
Q711	2SC2240(GR,BL)	SILICON	TOSHIBA
Q712	2SC2240(GR,BL)	SILICON	TOSHIBA
Q751	2SD636(Q,R)	SILICON	MATSUSHITA
Q752	2SD636(Q,R)	SILICON	MATSUSHITA
Q753	2SC2240(BL)	SILICON	TOSHIBA
Q754	2SC2240(BL)	SILICON	TOSHIBA
Q755	2SA970(BL)	SILICON	TOSHIBA
Q756	2SA970(BL)	SILICON	TOSHIBA
Q757	2SC2235(O,Y)	SILICON	TOSHIBA
Q758	2SC2235(O,Y)	SILICON	TOSHIBA
Q759	2SA965(O,Y)	SILICON	TOSHIBA
Q760	2SA965(O,Y)	SILICON	TOSHIBA
Q761	2SC3854LC(O, P, Y)	SILICON	SANKEN
Q762	2SC3854LC(O, P, Y)	SILICON	SANKEN
Q763	2SA1490LC(O, P, Y)	SILICON	SANKEN
Q764	2SA1490LC(O, P, Y)	SILICON	SANKEN
Q765	2SC3854LC(O, P, Y)	SILICON	SANKEN
Q766	2SC3854LC(O, P, Y)	SILICON	SANKEN
Q767	2SA1490LC(O, P, Y)	SILICON	SANKEN
Q768	2SA1490LC(O, P, Y)	SILICON	SANKEN
Q775	2SC2240(GR,BL)	SILICON	TOSHIBA
Q776	2SC2240(GR,BL)	SILICON	TOSHIBA
Q777	2SA970(GR,BL)	SILICON	TOSHIBA
Q778	2SA970(GR,BL)	SILICON	TOSHIBA
Q801	2SD2061(F,G)	SILICON	ROHM
Q802	2SB1187(F,G)	SILICON	ROHM
Q803	2SK246(GR)	F.E.T	TOSHIBA
Q804	2SK246(GR)	F.E.T	TOSHIBA
Q805	2SA933S(R,S)	SILICON	ROHM
Q806	2SC3068	SILICON	SANYO
Q901	2SC2389(S,E)	SILICON	ROHM
Q902	2SC2389(S,E)	SILICON	ROHM
Q903	2SA564A(R,S)	SILICON	MATSUSHITA

Δ : SAFETY PARTS

## I.C.s

△	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC601	BA15218N	I.C.	MITSUBISHI	
	IC602	BA15218N	I.C.	MITSUBISHI	
	IC603	PC817A	I.C.	SHARP	
	IC604	PC817A	I.C.	SHARP	
	IC751	VC5022(X,Y)	I.C.	ROHM	
	IC752	VC5022(X,Y)	I.C.	ROHM	
	IC901	UPC1237HA	I.C.	RYOSAN	

Δ : SAFETY PARTS

## Diodes

△	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D601	1SS133	SILICON	ROHM	
	D602	1SS133	SILICON	ROHM	
	D603	1SS133	SILICON	ROHM	
	D604	1SS133	SILICON	ROHM	
	D605	1SS133	SILICON	ROHM	
	D606	1SS133	SILICON	ROHM	
	D607	MTZ4.7JB	ZENER	ROHM	
	D608	MTZ4.7JB	ZENER	ROHM	
	D609	1SS133	SILICON	ROHM	
	D610	1SS133	SILICON	ROHM	
	D611	MTZ10JC	ZENER	ROHM	
	D612	MTZ4.3JB	ZENER	ROHM	
	D701	1SS133	SILICON	ROHM	
	D702	1SS133	SILICON	ROHM	
	D703	1SS133	SILICON	ROHM	
	D704	1SS133	SILICON	ROHM	
	D751	1SS133	SILICON	ROHM	
	D752	1SS133	SILICON	ROHM	
	D761	1SS133	SILICON	ROHM	
	D762	1SS133	SILICON	ROHM	
	D763	1SS133	SILICON	ROHM	
	D764	1SS133	SILICON	ROHM	
	D801	30DF2SFC	SILICON	NIHONINTER	C
	D801	30DL2FC	SILICON	NIHONINTER	A
	D801	30DL2FC	SILICON	NIHONINTER	B
	D801	30DL2FC	SILICON	NIHONINTER	DBS
	D801	30DL2FC	SILICON	NIHONINTER	E
	D802	30DF2SFC	SILICON	NIHONINTER	C
	D802	30DL2FC	SILICON	NIHONINTER	A
	D802	30DL2FC	SILICON	NIHONINTER	B
	D802	30DL2FC	SILICON	NIHONINTER	DBS
	D802	30DL2FC	SILICON	NIHONINTER	E
	D803	30DF2SFC	SILICON	NIHONINTER	C
	D803	30DL2FC	SILICON	NIHONINTER	A
	D803	30DL2FC	SILICON	NIHONINTER	B
	D803	30DL2FC	SILICON	NIHONINTER	DBS
	D803	30DL2FC	SILICON	NIHONINTER	E
	D804	30DF2SFC	SILICON	NIHONINTER	C
	D804	30DL2FC	SILICON	NIHONINTER	A
	D804	30DL2FC	SILICON	NIHONINTER	B
	D804	30DL2FC	SILICON	NIHONINTER	DBS
	D804	30DL2FC	SILICON	NIHONINTER	E
	D805	MTZ15JC	ZENER	ROHM	
	D807	MTZ13JC	ZENER	ROHM	
	D808	MTZ13JC	ZENER	ROHM	
	D809	MTZ18JC	ZENER	ROHM	
	D810	MTZ18JC	ZENER	ROHM	
	D811	MTZ18JC	ZENER	ROHM	
	D812	ERA15-02L19	SILICON	KYUDDOU	
	D813	1SS133	SILICON	ROHM	
	D901	1SS133	SILICON	ROHM	
	D902	1SS133	SILICON	ROHM	
	D903	1SS133	SILICON	ROHM	

Δ : SAFETY PARTS

## Capacitors

ITEM	PART NUMBER	DESCRIPTION		AREA
C001	QCZ9038-103	0.01MF	CERAMIC	B
C001	QCZ9038-103	0.01MF	CERAMIC	C
C001	QCZ9038-103	0.01MF	CERAMIC	E
C001	QCZ9038-103BS	0.01MF	CERAMIC	DBS
C601	QFN81HJ-223	0.022MF	50V MYLAR	
C602	QFN81HJ-223	0.022MF	50V MYLAR	
C603	QFN81HK-104	0.1MF	50V MYLAR	
C604	QETB1EM-106	10MF	25V ELECTRO	
C606	QETB1EM-107	100MF	25V ELECTRO	
C607	QETB1EM-476	47MF	25V ELECTRO	
C701	EEZ5009-106	10MF	ELECTRO	
C702	EEZ5009-106	10MF	ELECTRO	
C703	QFP81HJ-101	100PF	50V POLY	
C704	QFP81HJ-101	100PF	50V POLY	
C705	QFP81HJ-101	100PF	50V POLY	C
C705	QFP81HJ-470	47PF	50V POLY	A
C705	QFP81HJ-470	47PF	50V POLY	B
C705	QFP81HJ-470	47PF	50V POLY	DBS
C705	QFP81HJ-470	47PF	50V POLY	E
C706	QFP81HJ-101	100PF	50V POLY	C
C706	QFP81HJ-470	47PF	50V POLY	A
C706	QFP81HJ-470	47PF	50V POLY	B
C706	QFP81HJ-470	47PF	50V POLY	DBS
C706	QFP81HJ-470	47PF	50V POLY	E
C707	QCS21HJ-471	470PF	50V CERAMIC	

Δ : SAFETY PARTS

## Capacitors

ITEM	PART NUMBER	DESCRIPTION			AREA
C708	QCS21HJ-471	470PF	50V	CERAMIC	
C709	QCS21HJ-100	10PF	50V	CERAMIC	
C710	QCS21HJ-100	10PF	50V	CERAMIC	
C713	QEN51HM-475	4.7MF	50V	NON POLE	
C714	QEN51HM-475	4.7MF	50V	NON POLE	
C715	QCS21HJ-330	33PF	50V	CERAMIC	
C716	QCS21HJ-330	33PF	50V	CERAMIC	
C717	QCS21HJ-330	33PF	50V	CERAMIC	
C718	QCS21HJ-330	33PF	50V	CERAMIC	
C719	QCS21HJ-220	22PF	50V	CERAMIC	
C720	QCS21HJ-220	22PF	50V	CERAMIC	
C723	EEZ2505-476	47MF		ELECTRO	
C724	EEZ2505-476	47MF		ELECTRO	
C751	QFV81HJ-103	0.01MF	50V	T.FILM	
C752	QFV81HJ-103	0.01MF	50V	T.FILM	
C755	QCS32HJ-680	68PF	500V	CERAMIC	
C756	QCS32HJ-680	68PF	500V	CERAMIC	
C757	QCS32HJ-680	68PF	500V	CERAMIC	
C758	QCS32HJ-680	68PF	500V	CERAMIC	
C761	QFN81HK-223	0.022MF	50V	MYLAR	C
C762	QFN81HK-223	0.022MF	50V	MYLAR	C
C763	QFN81HK-223	0.022MF	50V	MYLAR	C
C764	QFN81HK-223	0.022MF	50V	MYLAR	C
C765	QFV81HJ-104	0.1MF	50V	T.FILM	A
C765	QFV81HJ-104	0.1MF	50V	T.FILM	B
C765	QFV81HJ-104	0.1MF	50V	T.FILM	C
C765	QFV81HJ-104	0.1MF	50V	T.FILM	DBS
C765	QFV81HJ-473	0.047MF	50V	T.FILM	E
C766	QFV81HJ-104	0.1MF	50V	T.FILM	A
C766	QFV81HJ-104	0.1MF	50V	T.FILM	B
C766	QFV81HJ-104	0.1MF	50V	T.FILM	C
C766	QFV81HJ-104	0.1MF	50V	T.FILM	DBS
C766	QFV81HJ-473	0.047MF	50V	T.FILM	E
C767	QFV81HJ-104	0.1MF	50V	T.FILM	A
C767	QFV81HJ-104	0.1MF	50V	T.FILM	B
C767	QFV81HJ-104	0.1MF	50V	T.FILM	C
C767	QFV81HJ-104	0.1MF	50V	T.FILM	DBS
C768	QFV81HJ-104	0.1MF	50V	T.FILM	A
C768	QFV81HJ-104	0.1MF	50V	T.FILM	B
C768	QFV81HJ-104	0.1MF	50V	T.FILM	C
C768	QFV81HJ-104	0.1MF	50V	T.FILM	DBS
C769	QCF21HP-222	2200PF	50V	CERAMIC	C
C770	QCF21HP-222	2200PF	50V	CERAMIC	C
C771	QCHB1EZ-223	0.022MF	25V	CERAMIC	C
C772	QCHB1EZ-223	0.022MF	25V	CERAMIC	C
C801	EEW6309-129T	12000MF		ELECTRO	
C802	EEW6309-129T	12000MF		ELECTRO	
C803	QETB1HM-476	47MF	50V	ELECTRO	
C804	QETB1HM-476	47MF	50V	ELECTRO	
C805	QCB81HK-101	100PF	50V	CERAMIC	
C809	QETB1EM-107	100MF	25V	ELECTRO	
C810	QETB1EM-107	100MF	25V	ELECTRO	
C811	QETB1EM-107	100MF	25V	ELECTRO	
C812	QFV81HJ-223	0.022MF	50V	T.FILM	
C813	QETB1JM-227	220MF	63V	ELECTRO	
C814	QETB1JM-227	220MF	63V	ELECTRO	
C815	QFH42EK-104	0.1MF	250V	M.MYLAR	
C816	QFN32AK-104	0.1MF	100V	MYLAR	
C818	QFN32AK-104	0.1MF	100V	MYLAR	
C819	QETB1HM-105	1MF	50V	ELECTRO	
C901	QETB1AM-227	220MF	10V	ELECTRO	
C902	QETB1CM-226	22MF	16V	ELECTRO	
C903	QETB1HM-475	4.7MF	50V	ELECTRO	
C904	QETB1HM-226	22MF	50V	ELECTRO	
C905	QETB1HM-105	1MF	50V	ELECTRO	

△ : SAFETY PARTS

## Resistors

ITEM	PART NUMBER	DESCRIPTION			AREA
R601	QRD167J-224	220K	1/6W	CARBON	
R602	QRD167J-224	220K	1/6W	CARBON	
R603	QRD167J-224	220K	1/6W	CARBON	
R604	QRD167J-224	220K	1/6W	CARBON	
R605	QRD167J-223	22K	1/6W	CARBON	
R606	QRD167J-223	22K	1/6W	CARBON	
R607	QRD167J-223	22K	1/6W	CARBON	
R608	QRD167J-223	22K	1/6W	CARBON	
R609	QRD167J-223	22K	1/6W	CARBON	
R610	QRD167J-223	22K	1/6W	CARBON	
R611	QRD167J-473	47K	1/6W	CARBON	
R612	QRD167J-473	47K	1/6W	CARBON	
R613	QRD167J-222	2.2K	1/6W	CARBON	
R614	QRD167J-222	2.2K	1/6W	CARBON	
R615	QRD167J-183	18K	1/6W	CARBON	
R616	QRD167J-183	18K	1/6W	CARBON	
R617	QRD167J-682	6.8K	1/6W	CARBON	

## Resistors

ITEM	PART NUMBER	DESCRIPTION			AREA
R618	QRD167J-682	6.8K	1/6W	CARBON	
R619	QRD167J-223	22K	1/6W	CARBON	
R620	QRD167J-221	220	1/6W	CARBON	
R621	QRD167J-103	10K	1/6W	CARBON	
R622	QRD167J-332	3.3K	1/6W	CARBON	
R623	QRD167J-471	470	1/6W	CARBON	
R624	QRD167J-303	30K	1/6W	CARBON	
R625	PTH59F04BF222TS			POSISTOR	
R627	QRD167J-153	15K	1/6W	CARBON	
R628	QRD167J-153	15K	1/6W	CARBON	
R629	QRD167J-822	8.2K	1/6W	CARBON	
R630	QRD167J-822	8.2K	1/6W	CARBON	
R631	QRD167J-333	33K	1/6W	CARBON	
R632	QRD167J-152	1.5K	1/6W	CARBON	
R633	QRD14CJ-271S	270	1/4W	UNF. CARBON	
R634	QRD14CJ-561S	560	1/4W	UNF. CARBON	
R701	QRD167J-222	2.2K	1/6W	CARBON	
R702	QRD167J-222	2.2K	1/6W	CARBON	
R703	QRD167J-104	100K	1/6W	CARBON	
R704	QRD167J-104	100K	1/6W	CARBON	
R705	QRD167J-202	2K	1/6W	CARBON	
R706	QRD167J-202	2K	1/6W	CARBON	
R707	QRD167J-202	2K	1/6W	CARBON	
R708	QRD167J-202	2K	1/6W	CARBON	
R709	QRD167J-103	10K	1/6W	CARBON	
R710	QRD167J-103	10K	1/6W	CARBON	
R711	QRD167J-101	100	1/6W	CARBON	
R712	QRD167J-101	100	1/6W	CARBON	
R713	QRD14CJ-821S	820	1/4W	UNF. CARBON	
R714	QRD14CJ-821S	820	1/4W	UNF. CARBON	
R715	QRD167J-163	16K	1/6W	CARBON	
R716	QRD167J-163	16K	1/6W	CARBON	
R717	QRD167J-823	82K	1/6W	CARBON	
R718	QRD167J-823	82K	1/6W	CARBON	
R719	QRD14CJ-121S	120	1/4W	UNF. CARBON	
R720	QRD14CJ-121S	120	1/4W	UNF. CARBON	
R721	QRD125J-103	10K	1/2W	UNF. CARBON	
R722	QRD125J-103	10K	1/2W	UNF. CARBON	
R725	QRD167J-391	390	1/6W	CARBON	
R726	QRD167J-391	390	1/6W	CARBON	
R727	QRD167J-152	1.5K	1/6W	CARBON	
R728	QRD167J-152	1.5K	1/6W	CARBON	
R729	QRD167J-333	33K	1/6W	CARBON	
R730	QRD167J-333	33K	1/6W	CARBON	
R731	QRD167J-391	390	1/6W	CARBON	
R732	QRD167J-391	390	1/6W	CARBON	
R733	QRD167J-152	1.5K	1/6W	CARBON	
R734	QRD167J-152	1.5K	1/6W	CARBON	
R735	QRG012J-392A	3.9K	1W	O.M.FILM	
R736	ERF032K-R22	0.22	3W	CEMENT	
R737	ERF032K-R22	0.22	3W	CEMENT	
R738	ERF032K-R22	0.22	3W	CEMENT	
R739	ERF032K-R22	0.22	3W	CEMENT	
R741	QRG022J-331A	330	2W	O.M.FILM	
R742	QRG022J-331A	330	2W	O.M.FILM	
R743	QRD167J-104	100K	1/6W	CARBON	
R744	QRD167J-104	100K	1/6W	CARBON	
R745	QRD14CJ-4R7S	4.7	1/4W	UNF. CARBON	C
R746	QRD14CJ-4R7S	4.7	1/4W	UNF. CARBON	C
R747	QRD14CJ-4R7S	4.7	1/4W	UNF. CARBON	C
R748	QRD14CJ-4R7S	4.7	1/4W	UNF. CARBON	C
R751	QVPE601-202	2K	0.15W	VARIABLE	
R752	QVPE601-202	2K	0.15W	VARIABLE	
R753	QRD167J-101	100	1/6W	CARBON	
R754	QRD167J-101	100	1/6W	CARBON	
R755	ERT-D2WFL351S	350	1/4W	THERMISTOR	
R756	ERT-D2WFL351S	350	1/4W	THERMISTOR	
R757	QRD167J-471	470	1/6W	CARBON	
R758	QRD167J-471	470	1/6W	CARBON	
R759	QRD167J-332	3.3K	1/6W	CARBON	
R760	QRD167J-332	3.3K	1/6W	CARBON	
R761	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
R762	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
R765	QRZ0077-272	2.7K	1/4W	FUSIBLE	
R766	QRZ0077-272	2.7K	1/4W	FUSIBLE	
R767	QRZ0077-471	470	1/4W	FUSIBLE	
R768	QRZ0077-471	470	1/4W	FUSIBLE	
R769	QRD14CJ-100S	10	1/4W	UNF. CARBON	E
R769	QRZ0077-4R7	4.7	1/4W	FUSIBLE	A
R769	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
R769	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
R769	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
R770	QRD14CJ-100S	10	1/4W	UNF. CARBON	E
R770	QRZ0077-4R7	4.7	1/4W	FUSIBLE	A
R770	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
R770	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
R770	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
R771	QRD14CJ-100S	10	1/4W	UNF. CARBON	E

△ : SAFETY PARTS



## Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
△	R771	QRZ0077-4R7	4.7	1/4W	FUSIBLE	A
△	R771	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
△	R771	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
△	R771	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
△	R772	QRD14CJ-100S	10	1/4W	UNF. CARBON	E
△	R772	QRZ0077-4R7	4.7	1/4W	FUSIBLE	A
△	R772	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
△	R772	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
△	R772	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
△	R773	QRD14CJ-100S	10	1/4W	UNF. CARBON	E
△	R773	QRZ0077-4R7	4.7	1/4W	FUSIBLE	A
△	R773	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
△	R773	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
△	R773	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
△	R774	QRD14CJ-100S	10	1/4W	UNF. CARBON	E
△	R774	QRZ0077-4R7	4.7	1/4W	FUSIBLE	A
△	R774	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
△	R774	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
△	R774	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
△	R775	QRD14CJ-100S	10	1/4W	UNF. CARBON	E
△	R775	QRZ0077-4R7	4.7	1/4W	FUSIBLE	A
△	R775	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
△	R775	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
△	R775	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
△	R776	QRD14CJ-100S	10	1/4W	UNF. CARBON	E
△	R776	QRZ0077-4R7	4.7	1/4W	FUSIBLE	A
△	R776	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
△	R776	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
△	R776	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
△	R777	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
△	R778	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
△	R779	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
△	R780	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
△	R781	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
△	R782	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
△	R783	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
△	R784	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
△	R785	QRG022J-100A	10	2W	O.M. FILM	
△	R786	QRG022J-100A	10	2W	O.M. FILM	
△	R787	QRD125J-101	100	1/2W	UNF. CARBON	C
△	R787	QRD125J-330	33	1/2W	UNF. CARBON	A
△	R787	QRD125J-330	33	1/2W	UNF. CARBON	B
△	R787	QRD125J-330	33	1/2W	UNF. CARBON	DBS
△	R787	QRD125J-330	33	1/2W	UNF. CARBON	E
△	R788	QRD125J-101	100	1/2W	UNF. CARBON	C
△	R788	QRD125J-330	33	1/2W	UNF. CARBON	A
△	R788	QRD125J-330	33	1/2W	UNF. CARBON	B
△	R788	QRD125J-330	33	1/2W	UNF. CARBON	DBS
△	R788	QRD125J-330	33	1/2W	UNF. CARBON	E
△	R791	QRD167J-561	560	1/6W	CARBON	
△	R792	QRD167J-561	560	1/6W	CARBON	
△	R793	QRD167J-561	560	1/6W	CARBON	
△	R794	QRD167J-561	560	1/6W	CARBON	
△	R795	QRD167J-221	220	1/6W	CARBON	
△	R796	QRD167J-221	220	1/6W	CARBON	
△	R797	QRD167J-181	180	1/6W	CARBON	
△	R798	QRD167J-181	180	1/6W	CARBON	
△	R801	QRD14CJ-330S	33	1/4W	UNF. CARBON	E
△	R801	QRZ0077-330	33	1/4W	FUSIBLE	A
△	R801	QRZ0077-330	33	1/4W	FUSIBLE	B
△	R801	QRZ0077-330	33	1/4W	FUSIBLE	C
△	R801	QRZ0077-330	33	1/4W	FUSIBLE	DBS
△	R802	QRD14CJ-330S	33	1/4W	UNF. CARBON	E
△	R802	QRZ0077-330	33	1/4W	FUSIBLE	A
△	R802	QRZ0077-330	33	1/4W	FUSIBLE	B
△	R802	QRZ0077-330	33	1/4W	FUSIBLE	C
△	R802	QRZ0077-330	33	1/4W	FUSIBLE	DBS
△	R803	QRD167J-223	22K	1/6W	CARBON	
△	R804	QRD167J-203	20K	1/6W	CARBON	
△	R811	QRD14CJ-330S	33	1/4W	UNF. CARBON	
△	R812	QRD14CJ-330S	33	1/4W	UNF. CARBON	
△	R813	QRD167J-223	22K	1/6W	CARBON	
△	R814	QRD167J-563	56K	1/6W	CARBON	
△	R816	QRD167J-393	39K	1/6W	CARBON	
△	R817	QRD167J-221	220	1/6W	CARBON	
△	R851	QRD167J-100	10	1/6W	CARBON	
△	R852	QRD167J-100	10	1/6W	CARBON	
△	R853	QRD167J-100	10	1/6W	CARBON	
△	R854	QRD167J-100	10	1/6W	CARBON	
△	R855	QRD167J-100	10	1/6W	CARBON	
△	R856	QRD167J-100	10	1/6W	CARBON	
△	R857	QRD167J-100	10	1/6W	CARBON	
△	R858	QRD167J-100	10	1/6W	CARBON	
△	R901	QRD167J-272	2.7K	1/6W	CARBON	
△	R902	QRD167J-272	2.7K	1/6W	CARBON	
△	R903	QRD167J-153	15K	1/6W	CARBON	
△	R904	QRD167J-153	15K	1/6W	CARBON	
△	R905	QRD167J-104	100K	1/6W	CARBON	

△ : SAFETY PARTS

## Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	R906	QRD167J-823	82K	1/6W	CARBON	
	R907	QRD167J-223	22K	1/6W	CARBON	
	R908	QRD167J-223	22K	1/6W	CARBON	
	R909	QRD167J-103	10K	1/6W	CARBON	
	R911	QRD167J-473	47K	1/6W	CARBON	
	R912	QRD167J-562	5.6K	1/6W	CARBON	
	R916	QRD167J-103	10K	1/6W	CARBON	
	R917	QRD167J-103	10K	1/6W	CARBON	
	R918	QRD167J-224	220K	1/6W	CARBON	
	R919	QRD167J-332	3.3K	1/6W	CARBON	
	R920	QRD167J-393	39K	1/6W	CARBON	
	R921	QRD167J-153	15K	1/6W	CARBON	
	R923	QRD167J-201	200	1/6W	CARBON	
△	R924	QRG022J-122A	1.2K	2W	O.M. FILM	

△ : SAFETY PARTS

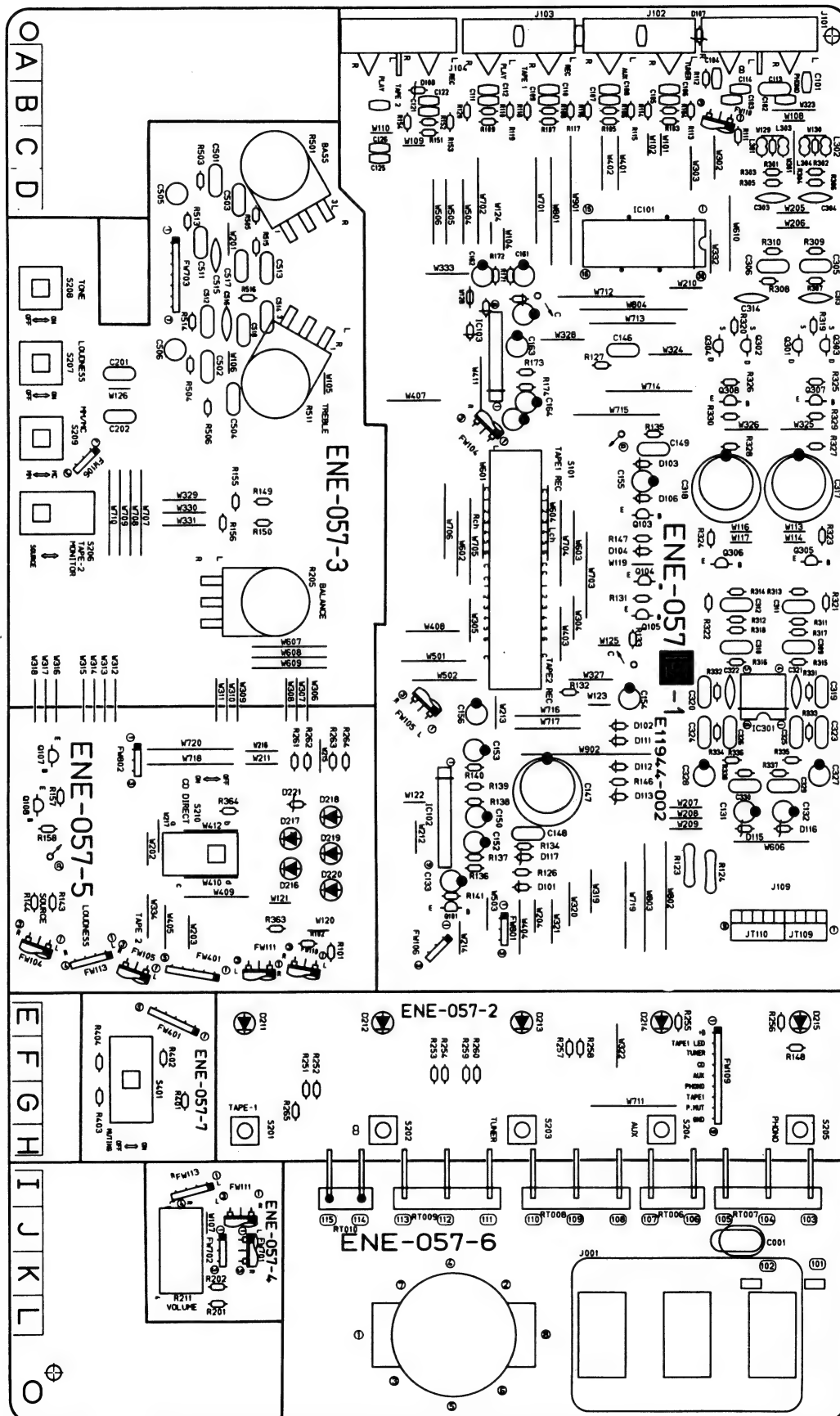
## Others

△	ITEM	PART NUMBER	DESCRIPTION			AREA
		EMG7331-002U	FUSE CLIP			A
		EMG7331-002U	FUSE CLIP			B
		EMG7331-002U	FUSE CLIP			C
		EMG7331-002U	FUSE CLIP			DBS
		EMG7331-002	FUSE CLIP			A
		EMG7331-002	FUSE CLIP			B
		EMG7331-002	FUSE CLIP			C
		EMG7331-002	FUSE CLIP			DBS
		EW011-079	TERMINAL WIRE			C
		E03675-004	FUSE CLIP			E
		E03891-001	TAB			E
		E11945-003	CIRCUIT BOARD			A
		E11945-003	CIRCUIT BOARD			B
		E11945-003	CIRCUIT BOARD			C
		E11945-003	CIRCUIT BOARD			E
		E11945-003BS	CIRCUIT BOARD			DBS
		E300209-031	HEAT SINK			
		E305991-001	BRACKET			
		E305992-001	BRACKET			
		E33754-001	TIE BAND			
		E65508-002	TAB			B
		E65508-002	TAB			C
		E65508-002	TAB			DBS
		E70945-H25	HEAT SINK			
		E70945-H40	HEAT SINK			
		E73525-003	SCREW			
		GBS83008CC	SCREW			
		SBS83008CC	SCREW			
		SBS83008CC	SCREW			
△	J001	QMC0638-001	AC OUTLET			E
	J701	EMV7122-003	CONNECTOR			
	J702	EMV7122-003	CONNECTOR			
	J751	EMB00TP-801G	SPEAKER TERMINAL			E
	J751	EMB00TP-801H	SPEAKER TERMINAL			A
	J751	EMB00TP-801H	SPEAKER TERMINAL			B
	J751	EMB00TP-801H	SPEAKER TERMINAL			C
	J751	EMB00TP-801H	SPEAKER TERMINAL			DBS
	J752	EMB00TP-801G	SPEAKER TERMINAL			E
	J752	EMB00TP-801H	SPEAKER TERMINAL			A
	J752	EMB00TP-801H	SPEAKER TERMINAL			B
	J752	EMB00TP-801H	SPEAKER TERMINAL			C
	J752	EMB00TP-801H	SPEAKER TERMINAL			DBS
	J753	QMS6A40-021	HEADPHONE JACK			
	J801	EMV7122-003	CONNECTOR			
	J802	EMV7122-003	CONNECTOR			
	L701	EQL0001-1R0	INDUCTOR			
	L702	EQL0001-1R0	INDUCTOR			
△	S001	QSP1106-005	POWER SWITCH			E
	S701	QST4231-E04	PUSH SWITCH			
	S702	QST4231-E04	PUSH SWITCH			
	EP001	E70859-001	EARTH PLATE			
	EP002	E70859-001	EARTH PLATE			
	JT703	EMV7122-003	CONNECTOR			
	JT704	EMV7122-004	CONNECTOR			
	RT001	E67764-202	WRAPPING TERMINAL			A
	RT002	E67764-202	WRAPPING TERMINAL			A
	RT003	E67764-203	WRAPPING TERMINAL			B
	RT003	E67764-203	WRAPPING TERMINAL			C
	RT003	E67764-203	WRAPPING TERMINAL			DBS
	RT004	E67764-202	WRAPPING TERMINAL			B
	RT004	E67764-202	WRAPPING TERMINAL			C
	RT004	E67764-202	WRAPPING TERMINAL			DBS
	RT005	E67764-302	WRAPPING TERMINAL			E
	RT801	E67764-103	WRAPPING TERMINAL			
	RY901	ESK5D24-218	RELAY			
	TP701	QMV5005-005K	PLUG ASSY			

△ : SAFETY PARTS

■ ENE-057 □ Source Selector PC Board Ass'y

**Note:** ENE-057 □ varies according to the areas employed. See note (1) when placing an order.





## Note (1)

PC Board Ass'y	Designated Areas
ENE-057 <b>A</b>	the U.S.A., Canada, Australia, the U.K., Continental Europe
ENE-057 <b>B</b>	West Germany
ENE-057 <b>C</b>	Other Countries

## Transistors

△	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q101	DTA144ES	SILICON	ROHM	
	Q103	2SC2389(S,E)	SILICON	ROHM	
	Q104	DTC144ES	SILICON	ROHM	
	Q105	DTA144ES	SILICON	ROHM	
	Q107	2SC3068	SILICON	SANYO	
	Q108	2SC3068	SILICON	SANYO	
	Q301	2SK170(BL)	F.E.T	TOSHIBA	
	Q302	2SK170(BL)	F.E.T	TOSHIBA	
	Q303	2SK170(BL)	F.E.T	TOSHIBA	
	Q304	2SK170(BL)	F.E.T	TOSHIBA	
	Q305	2SD655(E,F)	SILICON	HITACHI	
	Q306	2SD655(E,F)	SILICON	HITACHI	
	Q307	2SD655(E,F)	SILICON	HITACHI	
	Q308	2SD655(E,F)	SILICON	HITACHI	

△ : SAFETY PARTS

## I.C.s

△	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC101	LC7818	I.C.	SANYO	
	IC102	TA7317P	I.C.	TOSHIBA	
	IC103	VC4580LD	I.C.	JRC	
	IC301	NJM4560DD	I.C.	JRC	

△ : SAFETY PARTS

## Diodes

ITEM	PART NUMBER	DESCRIPTION		AREA
		MAKER		
D101	1SS133	SILICON	ROHM	
D102	1SS133	SILICON	ROHM	
D103	1SS133	SILICON	ROHM	
D104	1SS133	SILICON	ROHM	
D106	1SS133	SILICON	ROHM	
D107	MTZ3.3JB	ZENER	ROHM	
D108	MTZ3.3JB	ZENER	ROHM	
D111	1SS133	SILICON	ROHM	
D112	1SS133	SILICON	ROHM	
D113	MTZ5.6JC	ZENER	ROHM	
D115	MTZ13JC	ZENER	ROHM	
D116	MTZ13JC	ZENER	ROHM	
D117	MTZ6.8JC	ZENER	ROHM	
D211	SLR-331VR70F070	L.E.D.	ROHM	
D212	SLR-331DU70F070	L.E.D.	ROHM	
D213	SLR-331DU70F070	L.E.D.	ROHM	
D214	SLR-331DU70F070	L.E.D.	ROHM	
D215	SLR-331DU70F070	L.E.D.	ROHM	
D216	SLR-34YC50F165	L.E.D.	ROHM	
D217	SLR-34YC50F165	L.E.D.	ROHM	
D218	SLR-34DC50F165	L.E.D.	ROHM	
D219	SLR-34DC50F165	L.E.D.	ROHM	
D220	SLR-34DC50F165	L.E.D.	ROHM	
D221	MTZ5.1JC	ZENER		

△ : SAFETY PARTS

## Capacitors

ITEM	PART NUMBER	DESCRIPTION		AREA
C001	QCZ9038-103	0.01MF	CERAMIC	C
C101	QCBB1HK-471	470PF	50V CERAMIC	B
C102	QCBB1HK-471	470PF	50V CERAMIC	B
C103	QCBB1HK-471	470PF	50V CERAMIC	B
C104	QCBB1HK-471	470PF	50V CERAMIC	B

△ : SAFETY PARTS

## Capacitors

ITEM	PART NUMBER	DESCRIPTION			AREA
C105	QCBB1HK-221	220PF	50V	CERAMIC	B
C106	QCBB1HK-221	220PF	50V	CERAMIC	B
C107	QCBB1HK-221	220PF	50V	CERAMIC	B
C108	QCBB1HK-221	220PF	50V	CERAMIC	B
C109	QCBB1HK-221	220PF	50V	CERAMIC	B
C110	QCBB1HK-221	220PF	50V	CERAMIC	B
C111	QCBB1HK-221	220PF	50V	CERAMIC	B
C112	QCBB1HK-221	220PF	50V	CERAMIC	B
C113	QFV81HJ-103	0.01MF	50V	T.FILM	
C114	QCHB1EZ-223	0.022MF	25V	CERAMIC	
C121	QCBB1HK-221	220PF	50V	CERAMIC	B
C122	QCBB1HK-221	220PF	50V	CERAMIC	B
C125	QCBB1HK-221	220PF	50V	CERAMIC	B
C126	QCBB1HK-221	220PF	50V	CERAMIC	B
C131	QETB1EM-107	100MF	25V	ELECTRO	
C132	QETB1EM-107	100MF	25V	ELECTRO	
C133	QETB1EM-106	10MF	25V	ELECTRO	
C146	QFN81HJ-562	5600PF	50V	MYLAR	
C147	QETB0JM-228	2200MF	6.3V	ELECTRO	
C148	QFN81HJ-562	5600PF	50V	MYLAR	
C149	QFN81HK-473	0.047MF	50V	MYLAR	
C150	QETB1HM-225	2.2MF	50V	ELECTRO	
C152	QETB1CM-226	22MF	16V	ELECTRO	
C153	QETB1HM-475	4.7MF	50V	ELECTRO	
C154	QETB1CM-107	100MF	16V	ELECTRO	
C155	QETB1HM-474	0.47MF	50V	ELECTRO	
C156	QETB1HM-475	4.7MF	50V	ELECTRO	
C161	EEZ5009-106	10MF		ELECTRO	
C162	EEZ5009-106	10MF		ELECTRO	
C163	EEZ5009-106	10MF		ELECTRO	
C164	EEZ5009-106	10MF		ELECTRO	
C201	QFV81HJ-333	0.033MF	50V	T.FILM	
C202	QFV81HJ-333	0.033MF	50V	T.FILM	
C303	QCS21HJ-151	150PF	50V	CERAMIC	
C304	QCS21HJ-151	150PF	50V	CERAMIC	
C305	QFN81HK-103	0.01MF	50V	MYLAR	
C306	QFN81HK-103	0.01MF	50V	MYLAR	
C309	QFN81HK-392	3900PF	50V	MYLAR	
C310	QFN81HK-392	3900PF	50V	MYLAR	
C311	QFN81HK-822	8200PF	50V	MYLAR	
C312	QFN81HK-822	8200PF	50V	MYLAR	
C313	QCS21HJ-101	100PF	50V	CERAMIC	B
C313	QCS21HJ-680	68PF	50V	CERAMIC	A
C313	QCS21HJ-680	68PF	50V	CERAMIC	C
C314	QCS21HJ-101	100PF	50V	CERAMIC	B
C314	QCS21HJ-680	68PF	50V	CERAMIC	A
C314	QCS21HJ-680	68PF	50V	CERAMIC	C
C317	QETB0JM-228	2200MF	6.3V	ELECTRO	
C318	QETB0JM-228	2200MF	6.3V	ELECTRO	
C319	QFN81HJ-472	4700PF	50V	MYLAR	
C320	QFN81HJ-472	4700PF	50V	MYLAR	
C321	QCS21HJ-331	330PF	50V	CERAMIC	
C322	QCS21HJ-331	330PF	50V	CERAMIC	
C323	QFN81HJ-153	0.015MF	50V	MYLAR	
C324	QFN81HJ-153	0.015MF	50V	MYLAR	
C325	QFN81HJ-272	2700PF	50V	MYLAR	
C326	QFN81HJ-272	2700PF	50V	MYLAR	
C327	EETB2AM-106E	10MF	100V	ELECTRO	
C328	EETB2AM-106E	10MF	100V	ELECTRO	
C329	QFN81HJ-222	2200PF	50V	MYLAR	B
C330	QFN81HJ-222	2200PF	50V	MYLAR	B
C501	QFN81HK-153	0.015MF	50V	MYLAR	
C502	QFN81HK-153	0.015MF	50V	MYLAR	
C503	QFN81HK-823	0.082MF	50V	MYLAR	
C504	QFN81HK-823	0.082MF	50V	MYLAR	
C505	QEN51HM-475	4.7MF	50V	NON POLE	
C506	QEN51HM-475	4.7MF	50V	NON POLE	
C511	QFN81HK-332	3300PF	50V	MYLAR	
C512	QFN81HK-332	3300PF	50V	MYLAR	
C513	QFN81HK-183	0.018MF	50V	MYLAR	
C514	QFN81HK-183	0.018MF	50V	MYLAR	
C515	QCS21HJ-221	220PF	50V	CERAMIC	
C516	QCS21HJ-221	220PF	50V	CERAMIC	
C517	QFN81HK-122	1200PF	50V	MYLAR	
C518	QFN81HK-122	1200PF	50V	MYLAR	

△ : SAFETY PARTS

## Resistors

ITEM	PART NUMBER	DESCRIPTION			AREA
R101	QRD167J-105	1M	1/6W	CARBON	
R102	QRD167J-105	1M	1/6W	CARBON	
R103	QRD167J-105	1M	1/6W	CARBON	
R104	QRD167J-105	1M	1/6W	CARBON	
R105	QRD167J-105	1M	1/6W	CARBON	
R106	QRD167J-105	1M	1/6W	CARBON	
R107	QRD167J-105	1M	1/6W	CARBON	

## Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	R108	QRD167J-105	1M	1/6W	CARBON	
	R109	QRD167J-105	1M	1/6W	CARBON	
	R110	QRD167J-105	1M	1/6W	CARBON	
	R111	QRD167J-471	470	1/6W	CARBON	
	R112	QRD167J-471	470	1/6W	CARBON	
	R113	QRD167J-471	470	1/6W	CARBON	
	R114	QRD167J-471	470	1/6W	CARBON	
	R115	QRD167J-471	470	1/6W	CARBON	
	R116	QRD167J-471	470	1/6W	CARBON	
	R117	QRD167J-471	470	1/6W	CARBON	
	R118	QRD167J-471	470	1/6W	CARBON	
	R119	QRD167J-471	470	1/6W	CARBON	
	R120	QRD167J-471	470	1/6W	CARBON	
△	R123	QRZ0077-101	100	1/4W	FUSIBLE	
△	R124	QRZ0077-101	100	1/4W	FUSIBLE	
	R126	QRD167J-104	100K	1/6W	CARBON	
	R127	QRD167J-104	100K	1/6W	CARBON	
	R131	QRD167J-103	10K	1/6W	CARBON	
	R132	QRD167J-103	10K	1/6W	CARBON	
	R133	QRD167J-102	1K	1/6W	CARBON	
	R134	QRD167J-103	10K	1/6W	CARBON	
	R135	QRD167J-474	470K	1/6W	CARBON	
	R136	QRD167J-562	5.6K	1/6W	CARBON	
	R137	QRD167J-473	47K	1/6W	CARBON	
	R138	QRD167J-392	3.9K	1/6W	CARBON	
	R139	QRD167J-104	100K	1/6W	CARBON	
	R140	QRD167J-104	100K	1/6W	CARBON	
	R141	QRD167J-223	22K	1/6W	CARBON	
	R143	QRD167J-102	1K	1/6W	CARBON	
	R144	QRD167J-102	1K	1/6W	CARBON	
	R146	QRD167J-122	1.2K	1/6W	CARBON	
	R147	QRD167J-473	47K	1/6W	CARBON	
	R148	QRD167J-273	27K	1/6W	CARBON	
	R149	QRD167J-471	470	1/6W	CARBON	
	R150	QRD167J-471	470	1/6W	CARBON	
	R151	QRD167J-105	1M	1/6W	CARBON	
	R152	QRD167J-105	1M	1/6W	CARBON	
	R153	QRD167J-471	470	1/6W	CARBON	
	R154	QRD167J-471	470	1/6W	CARBON	
	R155	QRD167J-105	1M	1/6W	CARBON	
	R156	QRD167J-105	1M	1/6W	CARBON	
	R157	QRD167J-333	33K	1/6W	CARBON	
	R158	QRD167J-333	33K	1/6W	CARBON	
	R171	QRD167J-473	47K	1/6W	CARBON	
	R172	QRD167J-473	47K	1/6W	CARBON	
	R173	QRD167J-474	470K	1/6W	CARBON	
	R174	QRD167J-474	470K	1/6W	CARBON	
	R201	QRD167J-223	22K	1/6W	CARBON	
	R202	QRD167J-223	22K	1/6W	CARBON	
	R205	QVDB87M-EF5B	250K		VARIABLE	
	R211	QVDB87B-AF5VA	250K		VARIABLE	
	R251	QRD167J-122	1.2K	1/6W	CARBON	
	R252	QRD167J-122	1.2K	1/6W	CARBON	
	R253	QRD167J-122	1.2K	1/6W	CARBON	
	R254	QRD167J-122	1.2K	1/6W	CARBON	
	R255	QRD167J-122	1.2K	1/6W	CARBON	
	R256	QRD167J-122	1.2K	1/6W	CARBON	
	R257	QRD167J-122	1.2K	1/6W	CARBON	
	R258	QRD167J-122	1.2K	1/6W	CARBON	
	R259	QRD167J-122	1.2K	1/6W	CARBON	
	R260	QRD167J-122	1.2K	1/6W	CARBON	
	R261	QRD167J-122	1.2K	1/6W	CARBON	
	R262	QRD167J-112	1.1K	1/6W	CARBON	
	R263	QRD167J-102	1K	1/6W	CARBON	
	R264	QRD167J-122	1.2K	1/6W	CARBON	
	R265	QRD167J-104	100K	1/6W	CARBON	
	R301	QRD167J-331	330	1/6W	CARBON	B
	R302	QRD167J-331	330	1/6W	CARBON	B
	R303	QRD167J-473	47K	1/6W	CARBON	
	R304	QRD167J-473	47K	1/6W	CARBON	
	R305	QRD167J-471	470	1/6W	CARBON	
	R306	QRD167J-471	470	1/6W	CARBON	
	R307	QRD167J-5R6	5.6	1/6W	CARBON	
	R308	QRD167J-5R6	5.6	1/6W	CARBON	
	R309	QRD167J-101	100	1/6W	CARBON	
	R310	QRD167J-101	100	1/6W	CARBON	
	R311	QRD167J-562	5.6K	1/6W	CARBON	
	R312	QRD167J-562	5.6K	1/6W	CARBON	
	R313	QRD167J-270	27	1/6W	CARBON	
	R314	QRD167J-270	27	1/6W	CARBON	
	R315	QRD167J-561	560	1/6W	CARBON	
	R316	QRD167J-561	560	1/6W	CARBON	
	R317	QRD167J-562	5.6K	1/6W	CARBON	
	R318	QRD167J-562	5.6K	1/6W	CARBON	
	R319	QRD167J-222	2.2K	1/6W	CARBON	
	R320	QRD167J-222	2.2K	1/6W	CARBON	
	R321	QRD167J-272	2.7K	1/6W	CARBON	
	R322	QRD167J-272	2.7K	1/6W	CARBON	

△ : SAFETY PARTS

## Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	R323	QRD167J-273	27K	1/6W	CARBON	
	R324	QRD167J-273	27K	1/6W	CARBON	
	R325	QRD167J-273	27K	1/6W	CARBON	
	R326	QRD167J-273	27K	1/6W	CARBON	
	R327	QRD167J-180	18	1/6W	CARBON	
	R328	QRD167J-180	18	1/6W	CARBON	
	R329	QRD167J-221	220	1/6W	CARBON	
	R330	QRD167J-221	220	1/6W	CARBON	
	R331	QRD167J-153	15K	1/6W	CARBON	
	R332	QRD167J-153	15K	1/6W	CARBON	
	R333	QRD167J-184	180K	1/6W	CARBON	
	R334	QRD167J-184	180K	1/6W	CARBON	
	R335	QRD167J-471	470	1/6W	CARBON	
	R336	QRD167J-471	470	1/6W	CARBON	
	R337	QRD167J-104	100K	1/6W	CARBON	
	R338	QRD167J-104	100K	1/6W	CARBON	
	R363	QRD167J-471	470	1/6W	CARBON	
	R364	QRD167J-471	470	1/6W	CARBON	
	R501	QVDB87C-E15B	100K		VARIABLE	
	R503	QRD167J-203	20K	1/6W	CARBON	
	R504	QRD167J-203	20K	1/6W	CARBON	
	R505	QRD167J-362	3.6K	1/6W	CARBON	
	R506	QRD167J-362	3.6K	1/6W	CARBON	
	R511	QVDB87C-E15B	100K		VARIABLE	
	R513	QRD167J-472	4.7K	1/6W	CARBON	
	R514	QRD167J-472	4.7K	1/6W	CARBON	
	R515	QRD167J-821	820	1/6W	CARBON	
	R516	QRD167J-821	820	1/6W	CARBON	

△ : SAFETY PARTS

## Others

△	ITEM	PART NUMBER	DESCRIPTION			AREA
		E11944-003	CIRCUIT BOARD			
		E305983-001	HOLDER			
		E65508-002	TAB			
△		QSR0085-009	VOLTAGE SELECTOR			C
△	J001	QMC0637-004	AC OUTLET			C
	J101	EMN00TV-408A	4P PIN JACK			
	J102	EMN00TV-404A	4P PIN JACK			
	J103	EMN00TV-404A	4P PIN JACK			
	J104	EMN00TV-404A	4P PIN JACK			
	L301	EQL4004-270	INDUCTOR			B
	L302	EQL4004-270	INDUCTOR			B
	L303	EQL4004-220	INDUCTOR			B
	L304	EQL4004-220	INDUCTOR			B
	S101	QSS1J46-E01	SLIDE SWITCH			
	S201	ESP0001-018	TACT SWITCH			
	S202	ESP0001-018	TACT SWITCH			
	S203	ESP0001-018	TACT SWITCH			
	S204	ESP0001-018	TACT SWITCH			
	S205	ESP0001-018	TACT SWITCH			
	S206	QSTL451-E01	PUSH SWITCH			
	S210	QSTL101-E04	PUSH SWITCH			
	FW104	EWR23C-35NN	FLAT WIRE			
	FW105	EWR23C-30NN	FLAT WIRE			
	FW106	EWR33B-35SST	FLAT WIRE			
	FW109	EWR39B-20LST	FLAT WIRE			
	FW110	EWR23C-40NN	FLAT WIRE			
	FW111	EWR23C-16NN	FLAT WIRE			
	FW113	EWR34B-20SST	FLAT WIRE			
	FW701	EWR23C-13LN	FLAT WIRE			
	FW702	EWR33B-13LST	FLAT WIRE			
	FW703	EWR37B-40LST	FLAT WIRE			
	FW801	EWR33B-10LST	FLAT WIRE			
	FW802	EWR33B-20LST	FLAT WIRE			
	JT109	EMV7122-004	CONNECTOR			
	JT110	EMV7122-005	CONNECTOR			
	RT006	E67764-302	WRAPPING TERMINAL			C
	RT007	E67764-303	WRAPPING TERMINAL			C
	RT008	E67764-303	WRAPPING TERMINAL			C
	RT009	E67764-303	WRAPPING TERMINAL			C
	RT010	E67764-402	WRAPPING TERMINAL			C

△ : SAFETY PARTS

## Accessories List

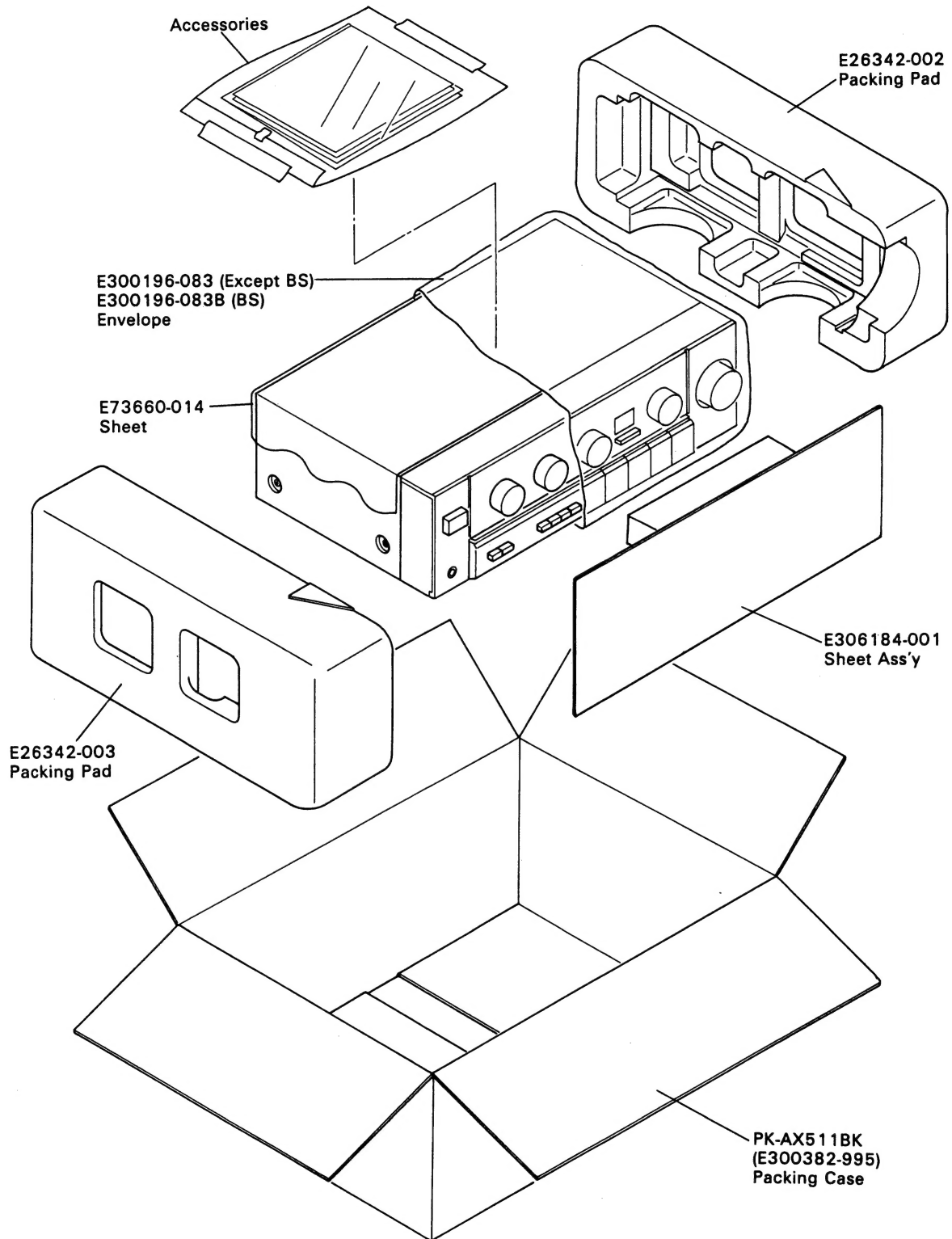
⚠	Part Number	Part Name	Q'ty	Description	Areas
	E30580-1518A E30580-1518ABS BT-20048C BT-20025K BT20029C	Instruction Book Instruction Book Warranty Card Warranty Card Warranty Card	1 1 1 1 1		Except BS BS J C A
	BT-20064A BT20060 BT20108 BT20044F BT20071A	Warranty Card Warranty Card Service Information Card Safety Instruction Sheet Service Center List	1 1 1 1 1		G BS J J C
	BT20066A BT20098 QZL1008-001 E72360-001 E35497-019	ECC Agency Audio Warranty FTZ Information Sheet Caution Sheet Caution Sheet	1 1 1 1 1	for New Zealand   220V	G,BS A G C U
⚠	E43486-340A E04056 E66416-003 E41202-2 E41202-2B	Safety Sheet Siemens Plug Envelope Envelope Envelope	1 1 1 1 1	for Warranty Card for Instruction Book for Instruction Book	BS U J Except BS BS

⚠ Safety Parts

### The Marks for Designated Areas

J.....the U.S.A.	G.....West Germany
C.....Canada	BS.....the U.K.
E,EF.....Continental Europe	U.....Other Countries
A.....Australia	<b>No mark indicates all areas.</b>

## Packing Materials and Part Numbers



The Marks for Designated Areas	
J.....the U.S.A.	G.....West Germany
C.....Canada	BS.....the U.K.
E,EF.....Continental Europe	U.....Other Countries
A.....Australia	No mark indicates all areas.